

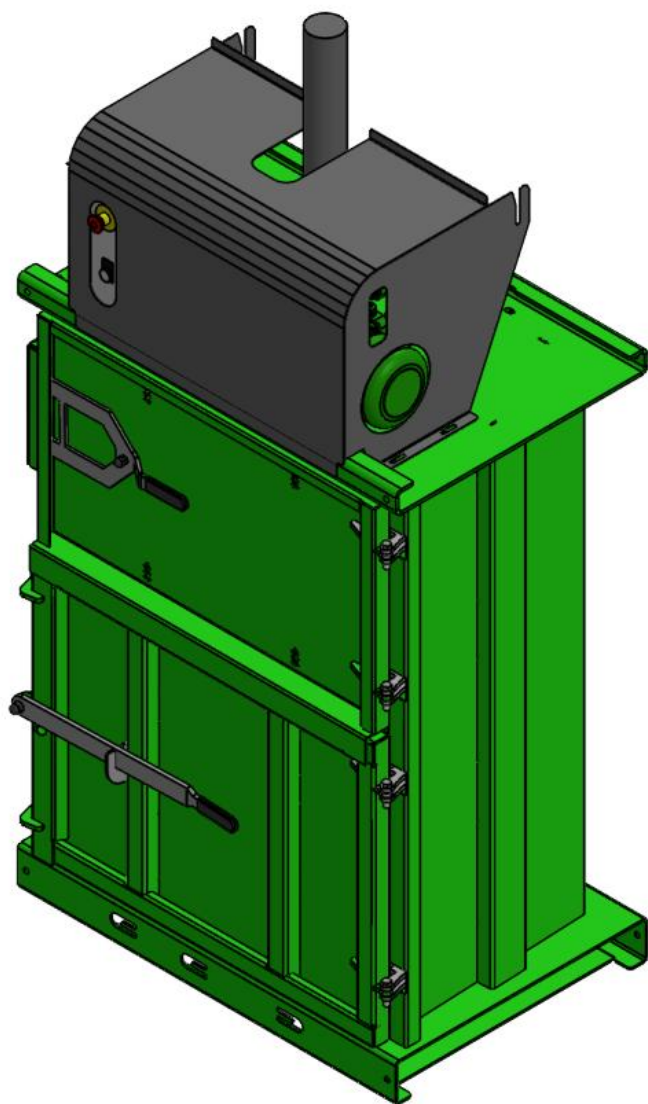


English

V4/V5/V8 SIZE BALER E



## OPERATOR INSTRUCTION MANUAL V4/V5/V8 SIZE BALER



**SERIAL NO:**  
**INSTALLATION DATE:**  
**CE Certified**  
**EN16500 Compliant**



[www.lsm ltd.com](http://www.lsm ltd.com)

*Keep these instructions for future use!*



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## **1. INTRODUCTION**

Congratulations on your purchase of an LSM BALER.

### **PLEASE READ THE FOLLOWING MANUAL BEFORE USING THE MACHINE.**

Read this manual carefully for instructions on how to operate your Material Baler correctly. In order for you to achieve the best possible results with your new Material Baler, we kindly ask you to study the following pages carefully before use.

Please complete the specification and warranty sheets immediately after purchase.

**Remember! Warranty forms must be returned to us fully completed within 30 days of purchase.** Warranty registration forms can be faxed to LSM. Failure to do so can result in loss of warranty for your machine.

This manual has been carefully written to help you maintain the condition of your machine. Please adhere to the recommended maintenance instructions to prolong the life of your machine.

**Keep safety in mind at all times. Failure to do so could result in personal injury or damage to your machine.**

All information, illustrations and specifications in this manual are based on the latest information available at the time of publication.

It is the policy of LSM Engineering Ltd. to improve its products whenever possible and practical to do so. We reserve the right to make changes or improvements at any time without incurring any obligation to make such changes on products sold.

Thank you for choosing LSM.



## 2. PREPARING THE BALER FOR TRANSPORTATION

Before transporting your baler, please perform these basic checks to avoid injury to persons or damage to your machine.

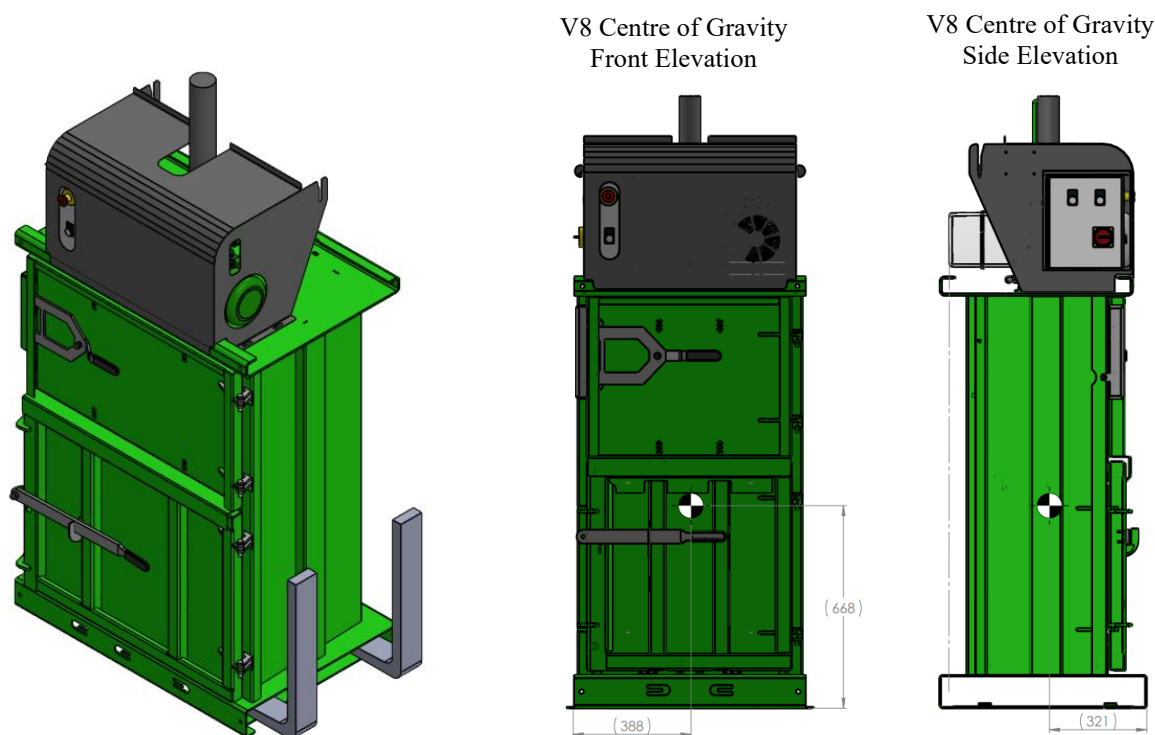
- Check that all doors are closed and latched
- Any trailing cables are tidied away
- The oil bung is in the tank
- All parts are bolted down parts are tight
- Any loose parts are placed inside the baler

### Moving the baler

Please take into consideration the centre of gravity of the machine when moving as it is high (shown by the black spot on the diagram below). This makes the machine unstable and top heavy. Take care to ensure that there are no personnel in the vicinity during the lifting process and only trained personnel to perform lifting duties.

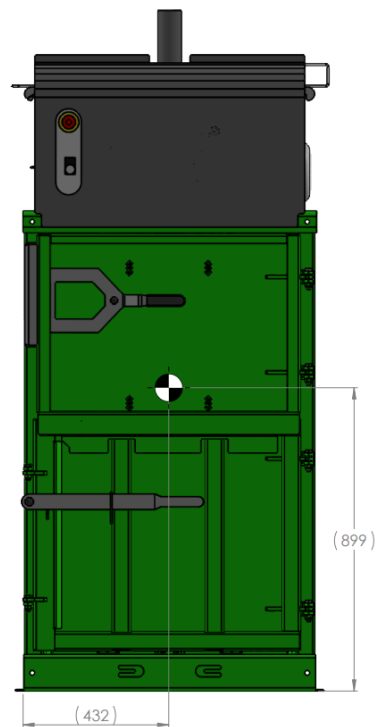
Moving the baler should only be done via the use of a forklift or pallet truck. Do not 'drag' the machine around by hand as this could cause injury to you, or damage to the machine.

When lifting a baler, the forks or pallet truck should be inserted in the gap in the base as shown below (approx. weights 200 - 350kg's).

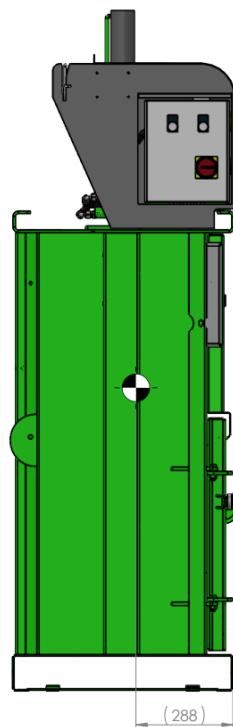


## PREPARING THE BALER FOR TRANSPORTATION

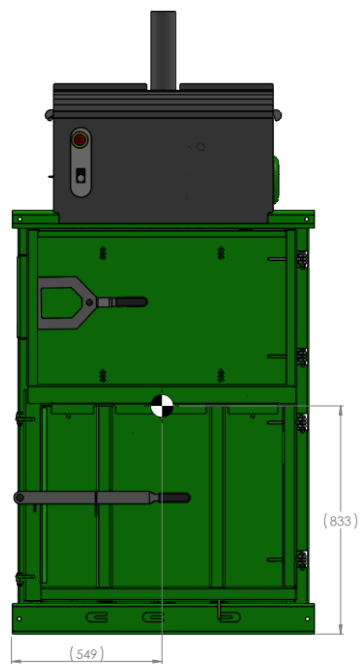
V5 Centre of Gravity  
Front Elevation



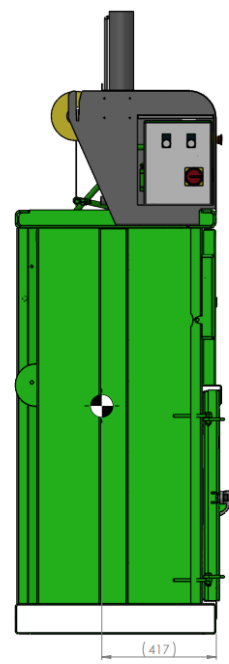
V5 Centre of Gravity  
Side Elevation



V8 Centre of Gravity  
Front Elevation



V8 Centre of Gravity  
Side Elevation

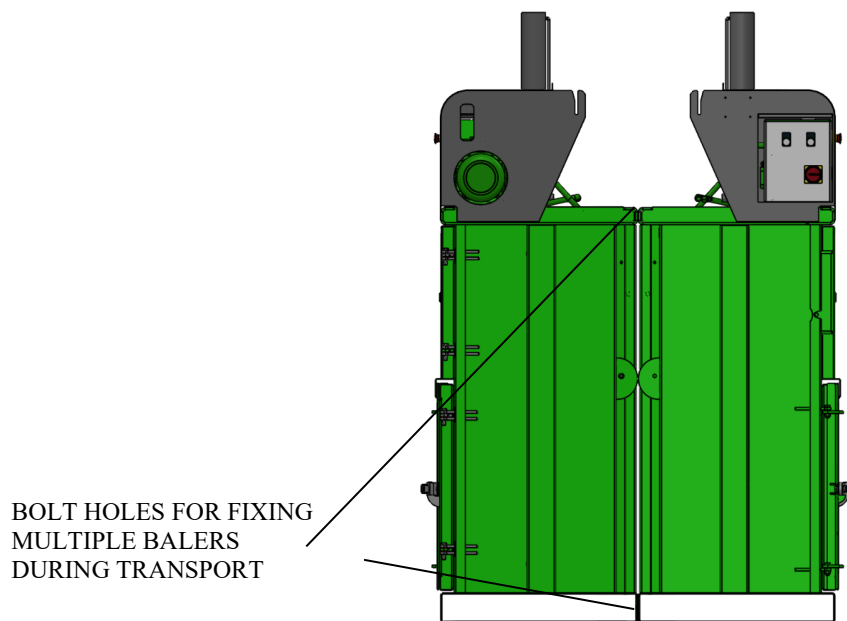


### 3. LOADING / UNLOADING THE BALER

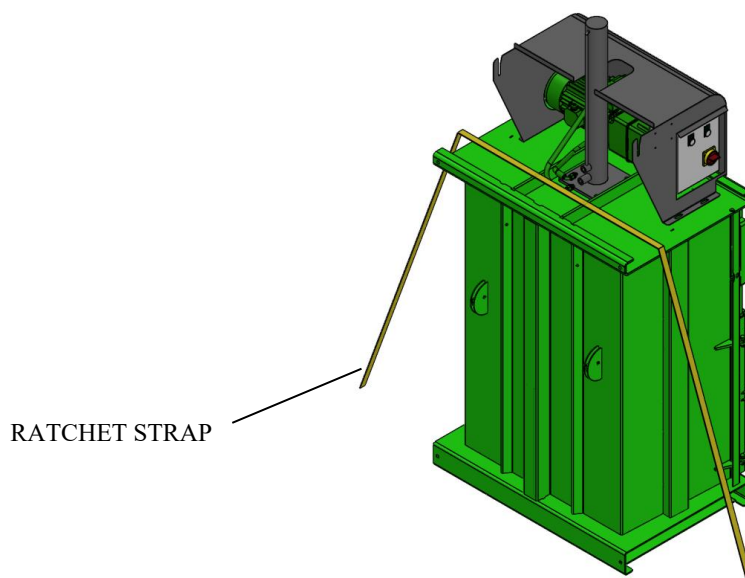
Carefully lift the machine on to the trailer. If transporting a single baler place it on the centre of the trailer over the axle to maintain trailer balance during transport.

If transporting multiple balers lift them onto the trailer via a fork truck. Carefully position the balers back – back and bolt them together via the bolt holes provided on both sides of the base and the top, this will provide extra stability during transport.

**UNDER NO CIRCUMSTANCES SHOULD A PERSON OR BODY PART BE UNDER THE MACHINE DURING LOADING OR MOVING**



When the baler or balers are in position on the trailer, they should be tied down using a ratchet strap. One strap across the top of the baler is sufficient to keep it fixed during transport.



When unloading the baler, the same procedure applies as when loading.

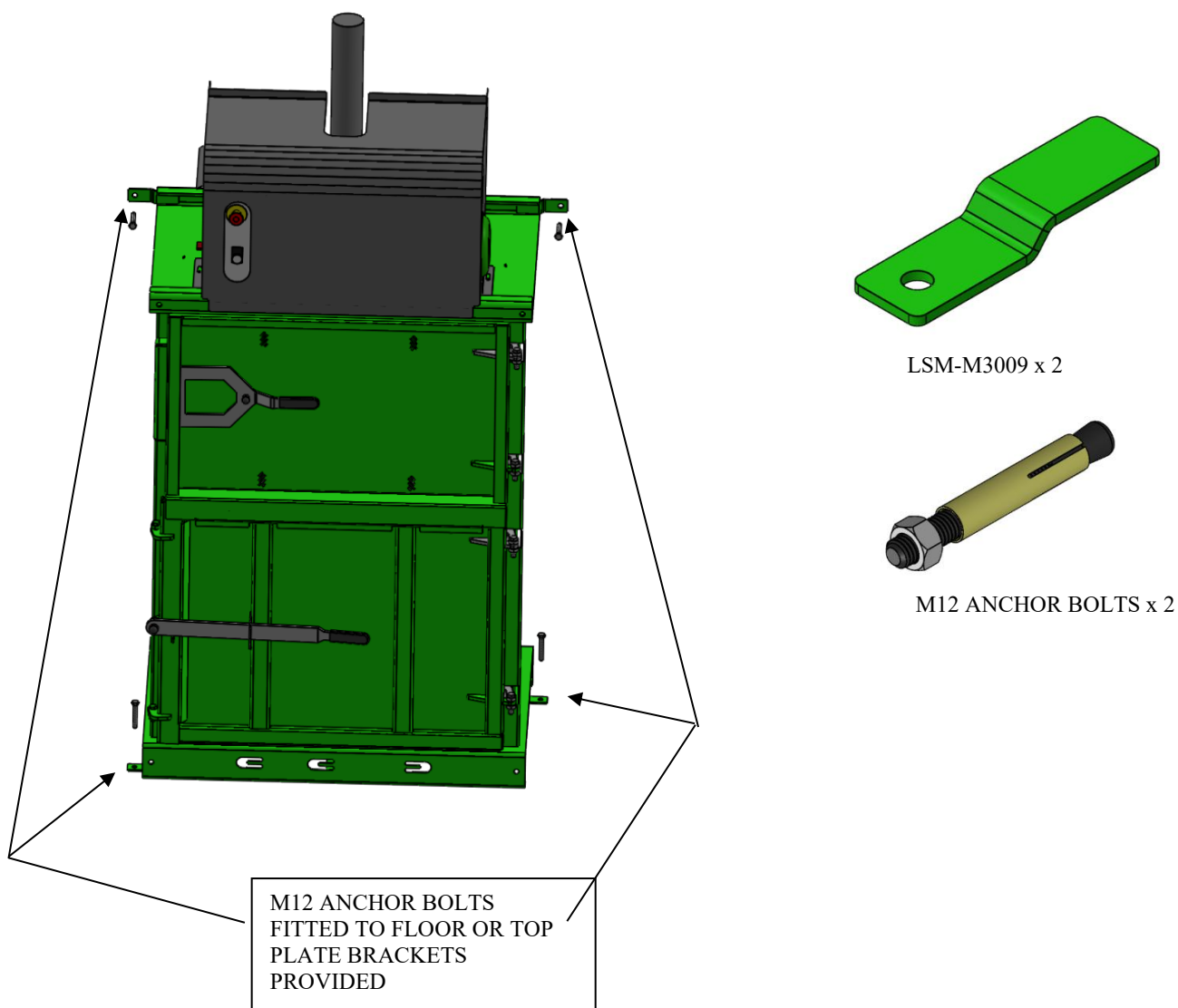
## 4. MACHINE INSTALLATION

Although the baler is suitable for outside use it is recommended that it is located inside or under a protective cover. Doing so will extend the life of your machine.

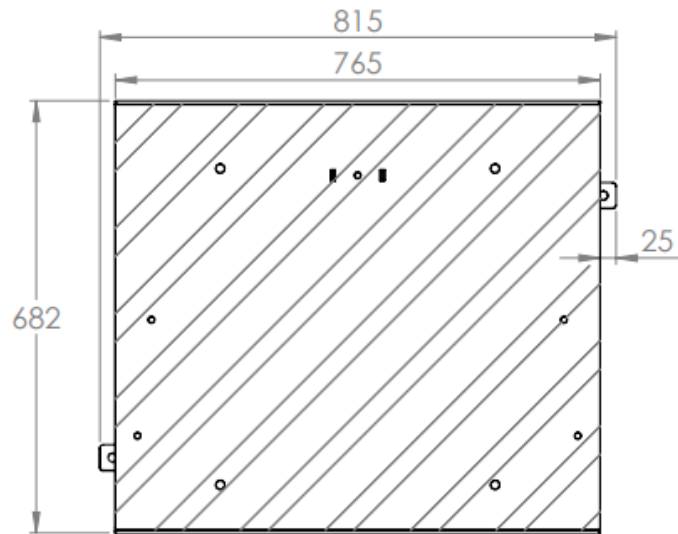
It is important to know how to safely move your machine into position. To do this use either a fork truck or a pallet truck and lift the machine via the base (page 6.) Do not attempt to move the machine by hand as this could cause injury to you or damage the machine, in part due to the machines high centre of gravity.

Fix your machine to a **solid level surface** to avoid toppling or movement while in operation. Brackets are provided with to the baler so it can be screwed into a wall or sound concrete ground. Use with proper fixings (M12 rawl bolts if fixing to concrete) and bolt down on either the 2 corners of the base or the top plate as shown in below.

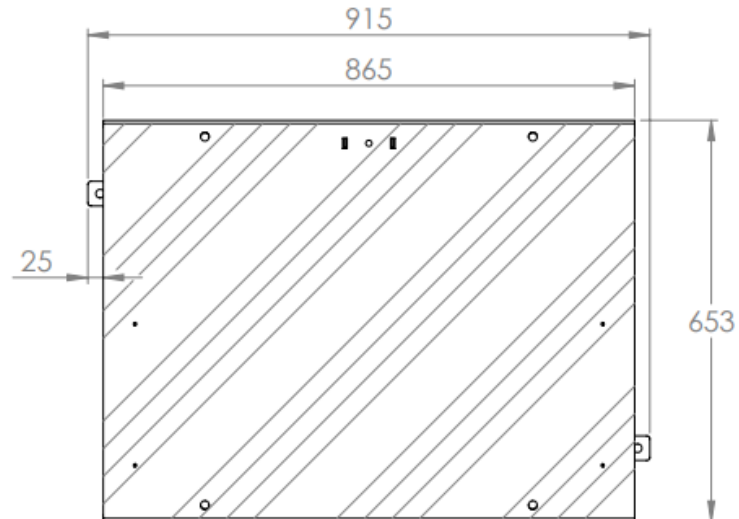
### 4.1. Securing the machine and Baler footprint.



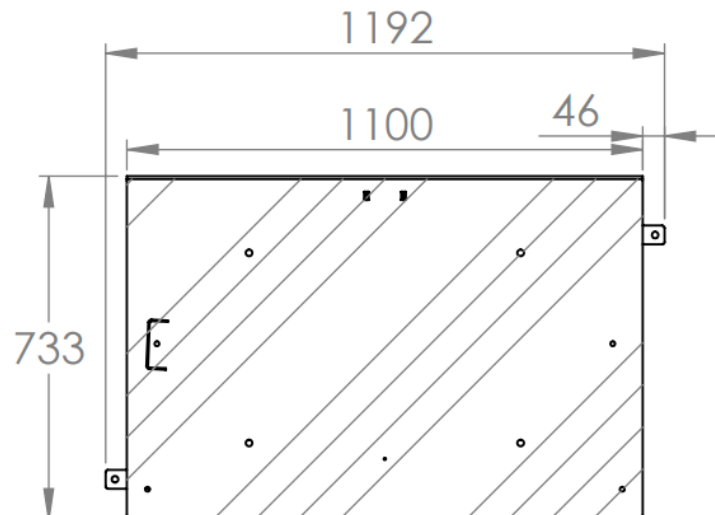
### V4 BALER



### V5 BALER



### V8 BALER





## **5. POWER SUPPLY REQUIREMENTS FOR LSM V4, V5, V8 BALERS**

Motor Size 1.5kW

1. 220V 1 phase and earth, 16amp supply (earth, neutral & live).
2. Supply should be protected by 16amp fuse (i.e., motor rated 16amps) or by a 16amp type D circuit breaker.
3. The isolator/ plug should be positioned ideally within 2m of the machine.
4. If outdoors, the isolator/plug should be waterproof to IP56, and we recommend it incorporates a 30mA RCD.



## 6. TECHNICAL DATA

### V4/V5/V8 BALER

**V4 – V5 Baler: Compaction Force:** Up to 5T  
**V8 Baler: Compaction Force:** Up to 8T

**Cycle Time:** 28 - 30 seconds

**Door Type:** Swinging Door Standard

**Bale Size Indicator:** Internal

**No. Of Rams:** 1

### Technical

**Motor Type:** 220 S Phase 1.5Kw motor

**Operator Controls:** 24V Standard

**Auto Shut Down:** Standard

**Operating Cycle:** Double Acting

**Emergency Stop:** Standard

**Cycle Time:** 28 - 30 Seconds

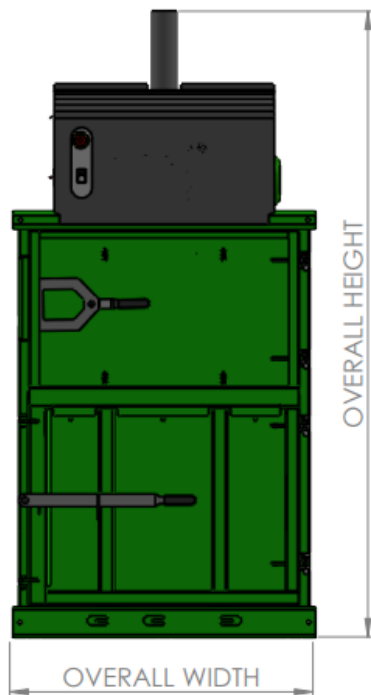


## 7. INDIVIDUAL COMPACTOR AND BALE SPECIFICATIONS

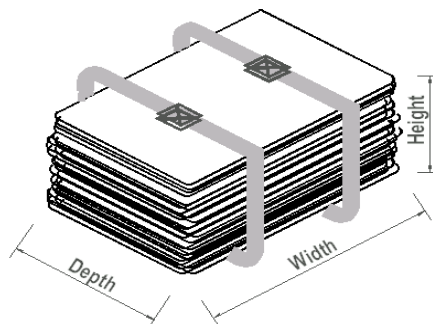
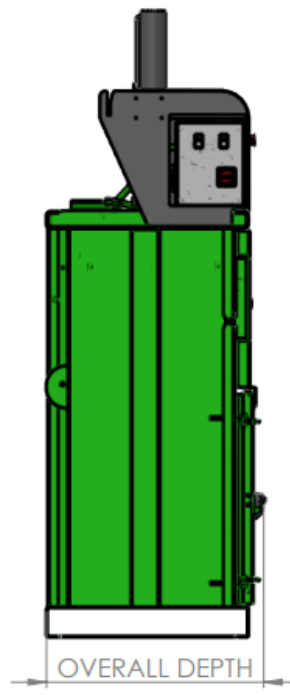
### 7.1. V4

| MACHINE SPEC.                      | V4      |
|------------------------------------|---------|
| Overall Height                     | 2050mm  |
| Overall Width                      | 765mm   |
| Overall Depth                      | 730mm   |
| F. Machine Weight Approx.          | 300kg   |
| BALE SPEC:                         |         |
| F. Height                          | 700mm   |
| G. Width                           | 600mm   |
| H. Depth                           | 400mm   |
| I. Bale Weight Approx. (cardboard) | 20-60kg |

*Machine Front Elevation*



*Machine Side Elevation*



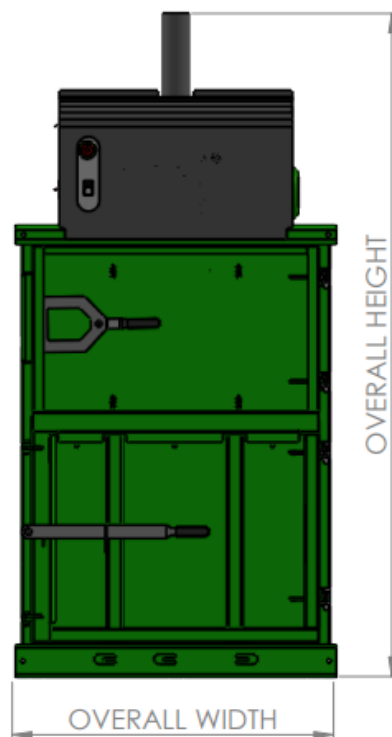


## INDIVIDUAL COMPACTOR AND BALE SPECIFICATIONS

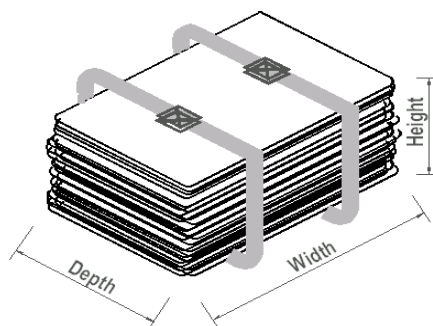
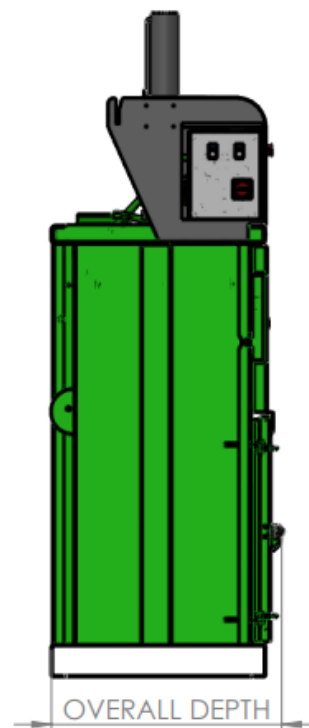
### 7.2. V5

| MACHINE SPEC.                      | V5        |
|------------------------------------|-----------|
| Height                             | 2015mm    |
| Width                              | 865mm     |
| Depth                              | 655mm     |
| F. Machine Weight Approx.          | 340kg     |
| BALE SPEC:                         |           |
| F. Height                          | 700mm     |
| G. Width                           | 750mm     |
| H. Depth                           | 500mm     |
| I. Bale Weight Approx. (cardboard) | 50- 100kg |

*Machine Front Elevation*



*Machine Side Elevation*



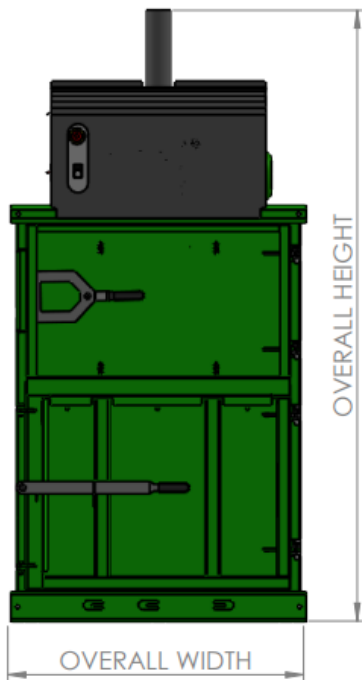


INDIVIDUAL COMPACTOR AND BALE SPECIFICATIONS

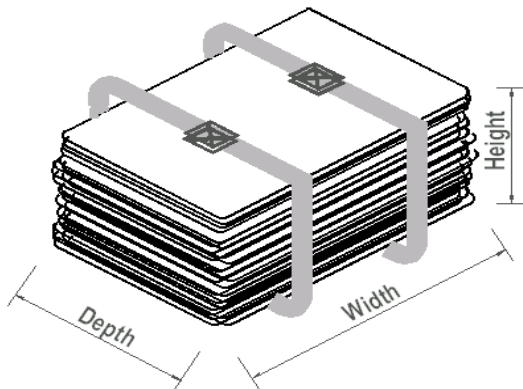
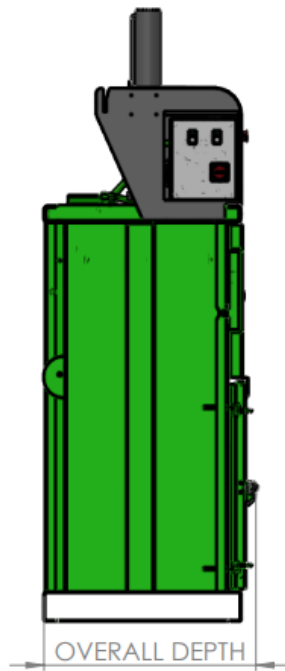
7.3. V8

| MACHINE SPEC.                      | V8               |
|------------------------------------|------------------|
| Height                             | 2270mm           |
| Width                              | 1100mm           |
| Depth                              | 745mm            |
| F. Machine Weight Approx.          | 580kg            |
| BALE SPEC:                         |                  |
| F. Height                          | 800mm (variable) |
| G. Width                           | 950mm            |
| H. Depth                           | 600mm            |
| I. Bale Weight Approx. (cardboard) | 100-180kg        |

*Machine Front Elevation*



*Machine Side Elevation*





## 8. GENERAL SAFETY

- ONLY A TRAINED ADULT IS ALLOWED TO OPERATE BALER.
- Inspect your machine carefully each time before use. This will only take a minute.
- If the public can access the baler or when machine is not in use disconnect from the power source and ensure door lock is applied.
- Apply door lock if leaving machine unattended.
- Children should never be in the area when your baler is in operation.
- Remember that the first step to avoiding danger is to recognize the hazards

### 8.1. **Safety checklist**

- Study this manual. Provide training for new users. Any machine is potentially dangerous when under the control of untrained personnel.
- Always disconnect all power sources before carrying out any adjustments or maintenance to your machine.
- Always lower the centre plate to its lowest position before carrying out any work inside the baler.
- If you suspect there is an oil leak in the system, DO NOT OPERATE! Instead, notify LSM or your local distributor immediately.
- The material baler is suitable ONLY to be used with the following: Cardboard, Paper, Plastic, Foam and Soft Materials
- Operators or helpers should avoid wearing loose clothing.
- Make sure the machine is positioned on a solid level surface and screwed into a wall or sound concrete floor with proper fixings. The machine is top heavy with a high centre of gravity.
- It is prohibited to bale spray-cans, aerosol cans or gas containers, cans with dangerous material or solid materials.
- It is prohibited to bale solid materials such as metal, wood, glass etc. as this will cause damage to the machinery.
- Using any prohibited materials may result in explosions and therefore cause danger to life.
- Never remove safety guards while there is still power going into the machine. All power must be off!
- Never operate machine without having all guards in place. They are there for your safety and protection.
- Machine Installation – It is important to fix your machine to a solid level surface to avoid movement while in operation.
- Always wear safety gloves provided when using your machine for your own safety!!

**Do not use this machine if you are unsure of any of the procedures or operations.**

**Contact our Service Department on 00353 (0) 57 8660379 or contact [info@lsmltd.com](mailto:info@lsmltd.com) or your local distributor.**

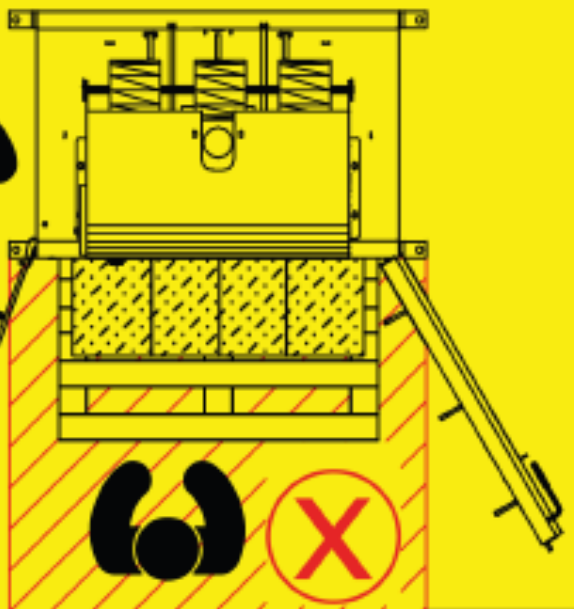
## 8.2. Safe operation zone ejection



Caution!  
Attention!  
Cautela!  
Cautela!  
Figyelmeztet!  
Atenție!  
Actung!  
Attentie!

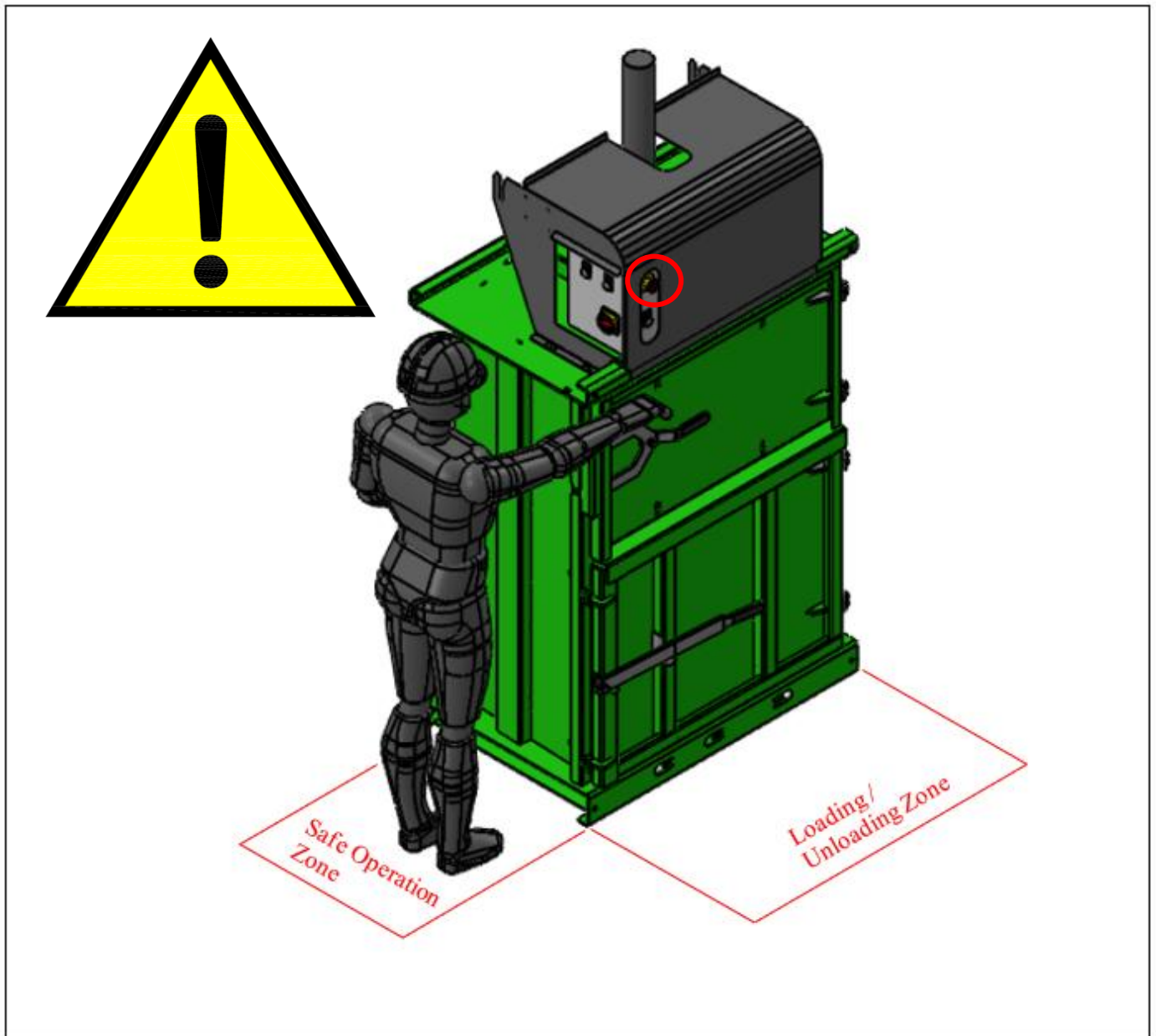
One Man Operation  
Opération a un seul opérateur  
Operazione one man  
Operación un hombre  
Egyszemélyes művelet  
Operație de om  
Einmannbedienung  
Eenman-bediening

**Danger! Danger! Pericolo! Peligro!**  
**Veszély! Pericol! Gafahr! Gevaar!**



- Observe safety area!
- Respecter la zone de securit!
- Osserva l'area di sicurezza!
- Respeten la zona de seguridad!
- Figyelje a biztonsági területet!
- Respectați zona de siguranță!
- Sicherheitsbereich einhalten!
- Velligheidsafstand bewaren!

### 8.3. Emergency stop location

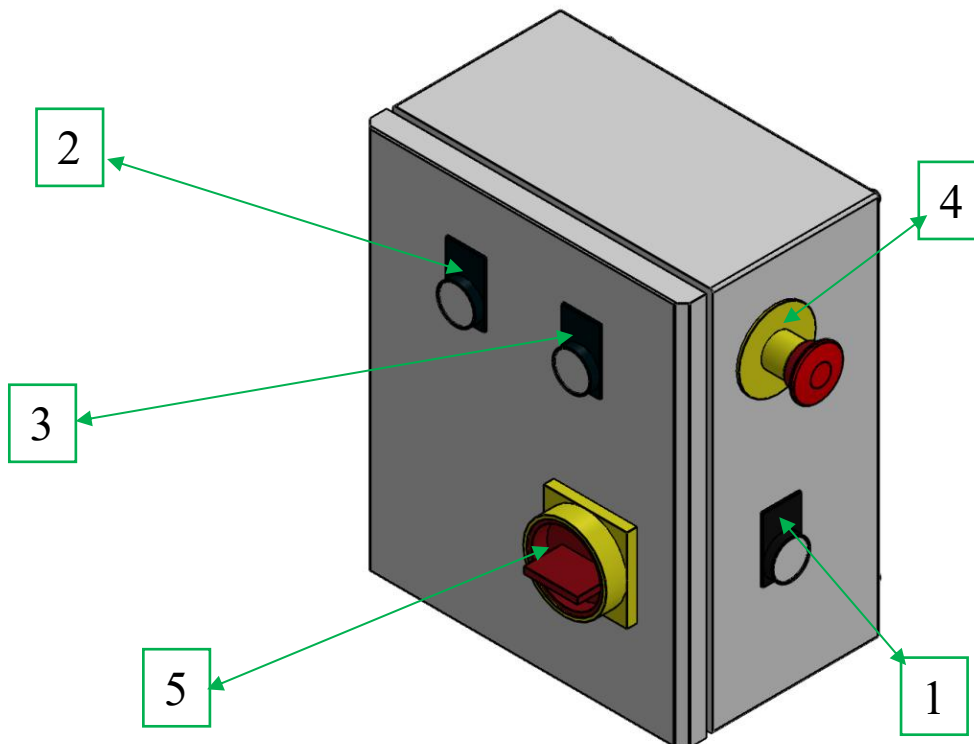


## 9. OPERATING INSTRUCTIONS (DECAL REFERENCE)

|                                                    |          |          |          |                         |          |          |          |          |                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------|----------|----------|----------|-------------------------|----------|----------|----------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1</p> <p>V4 / VS: 2 STRAPS<br/>V8: 3 STRAPS</p> | <p>2</p> | <p>3</p> | <p>4</p> | <p>5</p> <p>LSM9010</p> | <p>6</p> | <p>7</p> | <p>8</p> | <p>9</p> | <p>10</p> <p>11</p> <p>www.lsm ltd.com</p> <p>ALSO 1 X F9, ISO 11684 SAFETY LABEL.<br/>VERTICAL CONFIGURATION 38 X 68</p> <p>UP 3 &amp; 4</p> <p>DOWN 5 &amp; 6</p> <p>DOOR SAFETY 1 &amp; 2</p> <p>Q.C. PASSED</p> <p>DATE: _____</p> <p>TEST OP: _____</p> <p>↑</p> <p>↑</p> <p>⚠</p> <p>⚠</p> |
|----------------------------------------------------|----------|----------|----------|-------------------------|----------|----------|----------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 10. OPERATING INSTRUCTIONS

### 10.1. Control panel layout



**Please note the following explanation for each button on your control panel**

**1. Auto/UP/Reset:** This button when pressed causes the machine to complete 1 compression cycle. It will also cause the centreplate to raise during the bale eject sequence when held simultaneously with button 2. In the event of the emergency stop being pressed the green light won't illuminate immediately it needs to be pressed once to illuminate as this button also acts as the reset

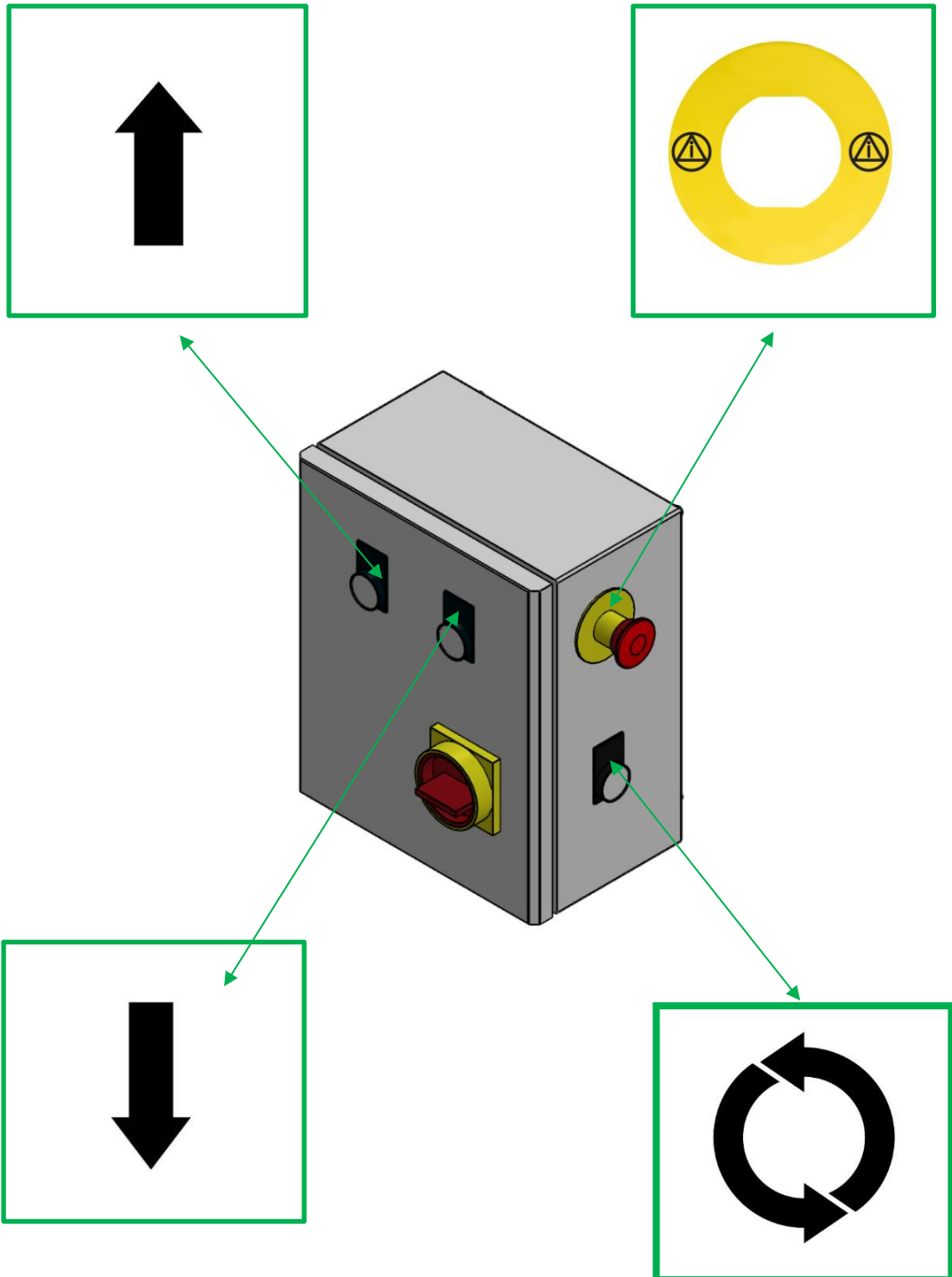
**2. Up:** Button 2 pressed will cause the centreplate to rise when the door is closed. When pressed simultaneously with button 1 it will raise the centreplate when the door is open allowing you to eject the bale

**3. Down:** This button will cause the centreplate to move downwards. (Use when tying bale)

**4. Emergency Stop:** This button will shut down the machine fully in an emergency

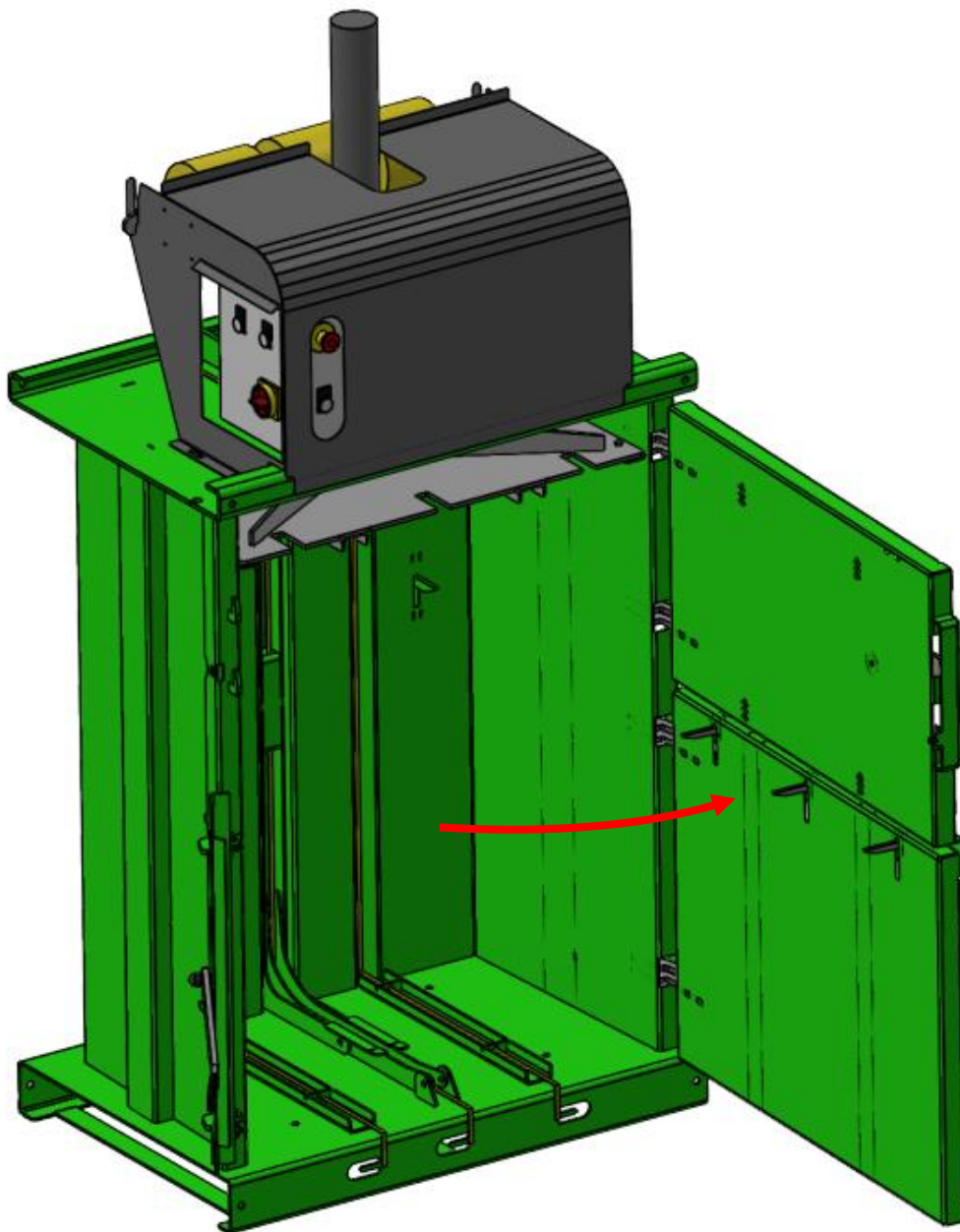
**5. Isolator Switch:** This button isolates power to the machine.

## 10.2. Control Panel Emblem Symbols



### 10.3. Preparation of the baler before loading

1. Place the spools of baling tape on the spool holder bar on rear of guard.  
V4 – V5 baler = 2 spools  
V8 baler = 3 spools
2. Ensure the piston is in the up position. Open top and bottom doors and feed the bale tape through the slots on the top of the machine into the bale chamber.
3. Continue pulling the Tape down the back of the Chamber, along the guides on the floor and tie the ends onto the bale tie points on the base
4. Place a full-size piece of cardboard on to the floor of the baler; this will be the base of the bale.
5. Close and latch the bottom door.

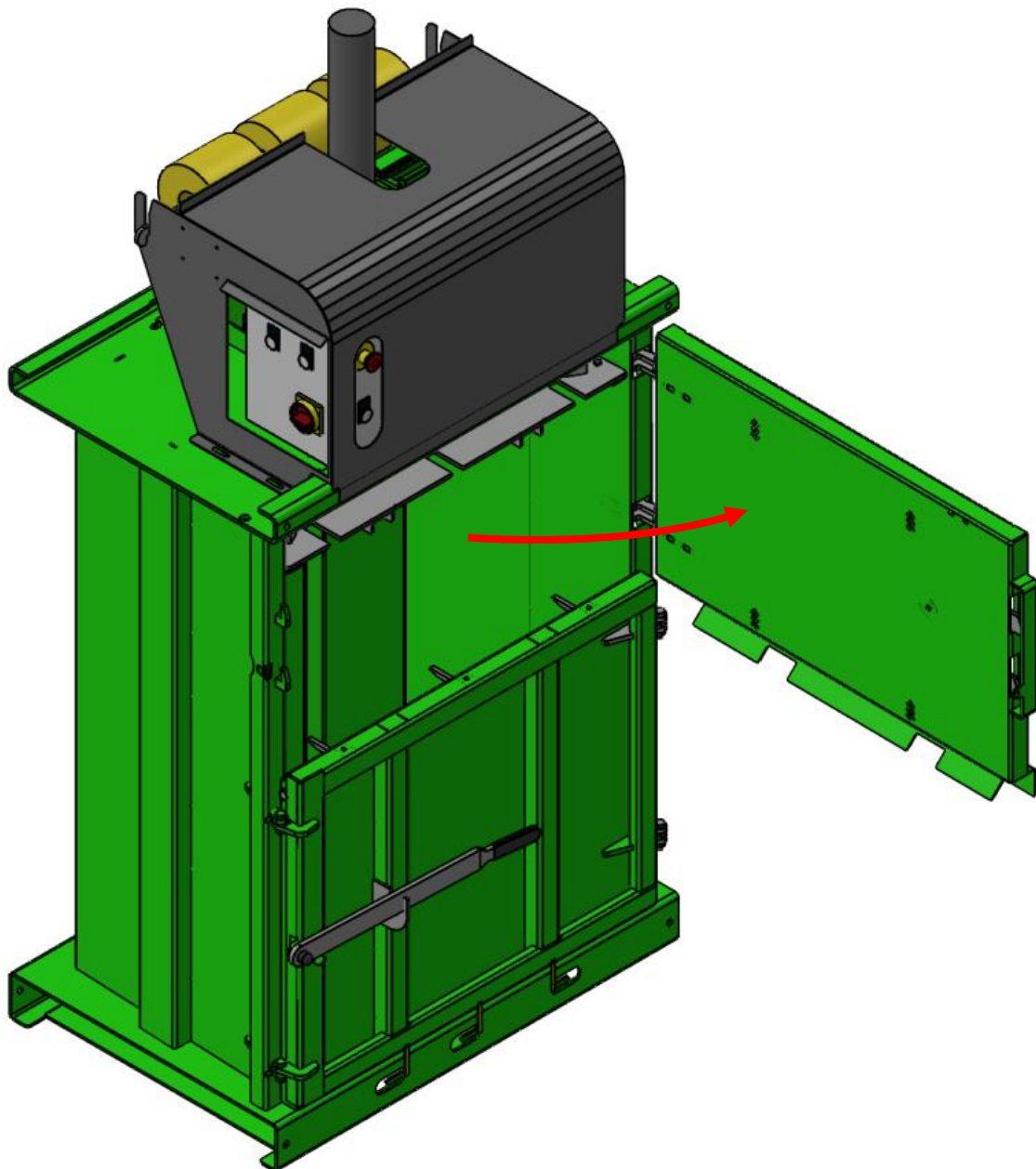




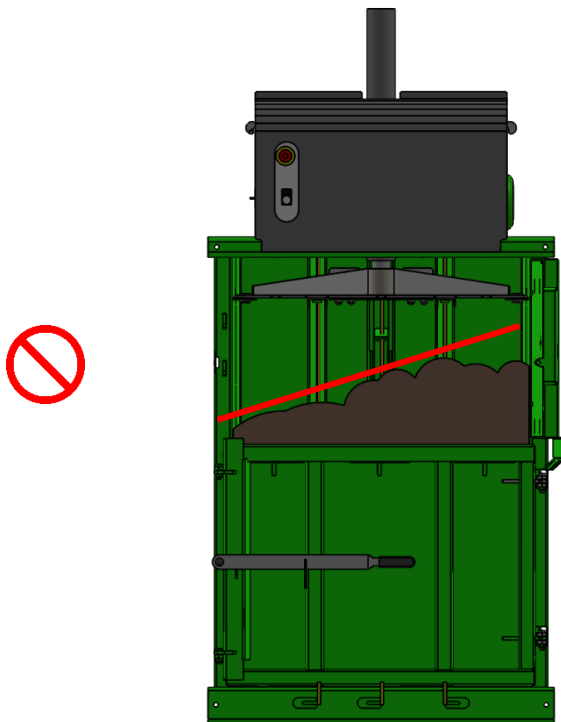
#### 10.4. Loading the Baler

1. With the **lower door closed** and the **Top Door open**, load the material evenly into chamber.
2. When the chamber is fully loaded, close and latch the Top Door then press the auto button on the electrical panel. This will cause the machine to complete 1 cycle, moving the packing plate down to compress the bale and then returning the packing plate to the starting position.
3. Repeat steps 1 and 2 above until the indicator is sitting at the tie position.  
Your Bale is now ready for tying.

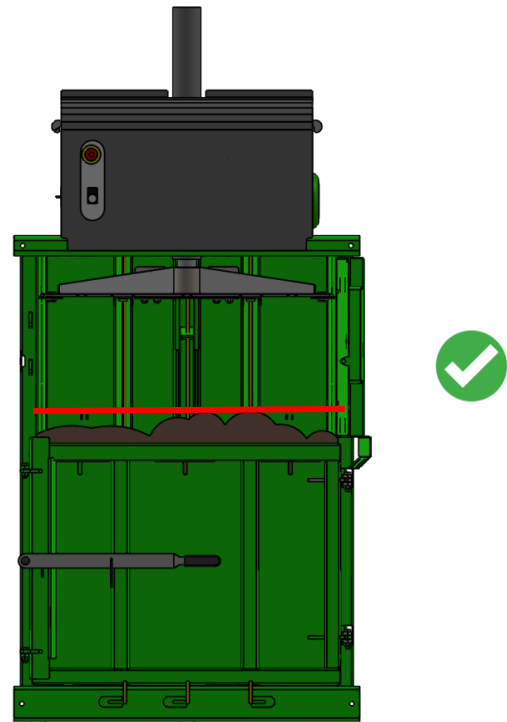
**TIP - Always load Baling Chamber evenly**



### *Uneven Loading*



### *Even Loading*

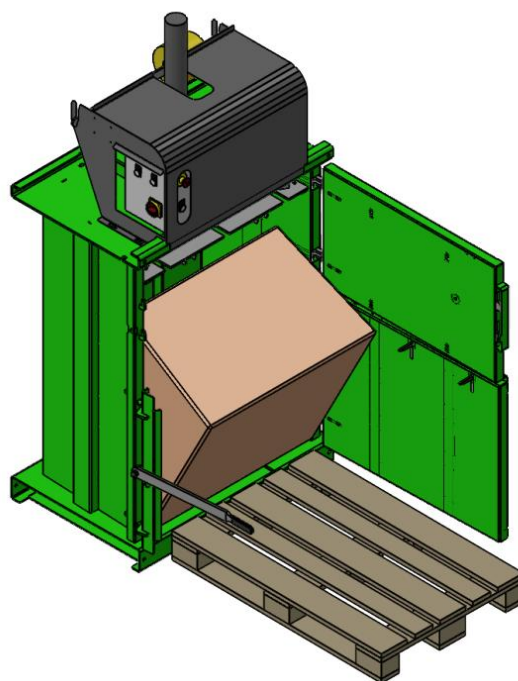
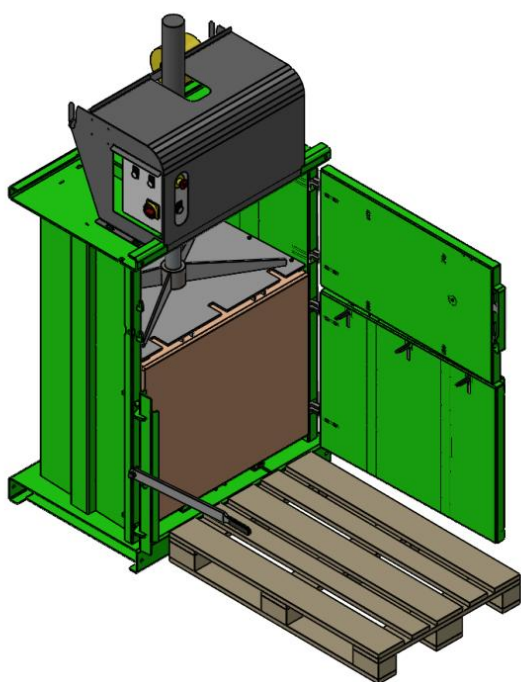
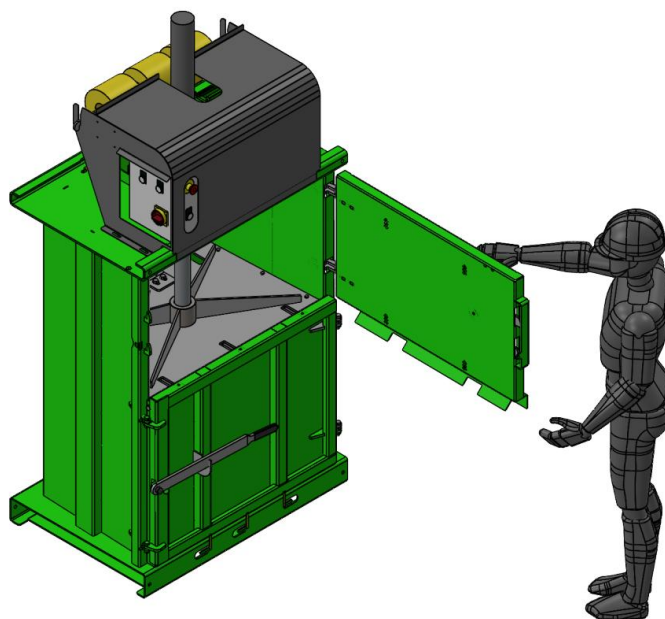
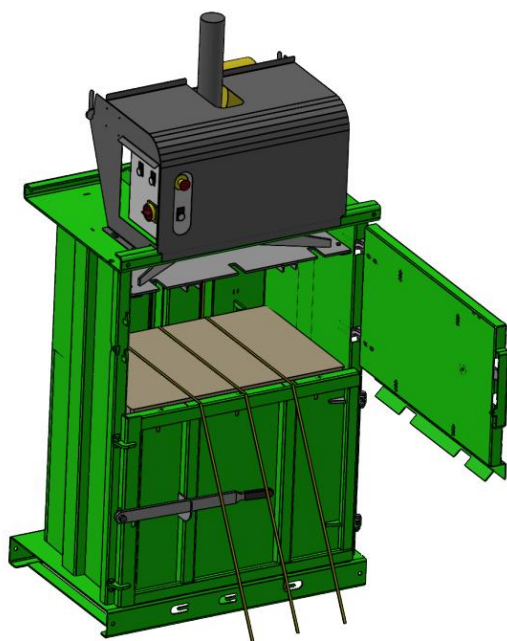


## 10.5. Tying and Removing the Bale (With Kicker)

1. When the bale is complete i.e., required size is achieved, raise the centreplate into the UP position. Open the top door only. Push the strap puller into the machine until it reaches the back of the machine at each of the strap points, turn the strap puller through 90 degrees to catch the strap and pull the strap over the top of the bale.
2. Pull the straps down the front of the machine and cut the end of the tape that you have just pulled, making sure it's long enough to feed through the loops on the other end of the strap (fixed to the base) + an extra 300-400mm.
3. Close the top door and recompress the bale. Open both top and bottom door.
4. Un-loop the strap from the base. Feed the end of the strap that has just been cut, through the end with the loop. Pull tight and tie off.
5. Once the bale has been tied, Use the strap puller to engage the bale eject bracket
6. ***Check the main door is completely open as the bale will not eject unless door is fully open.***
7. Press the 'UP' button & the 'AUTO' button on the control panel simultaneously until the "Bale Full" light goes out. **Note these buttons must be pressed within 0.5 seconds of each other and held pressed in for approx. 2 sec to engage or machine will not work.** The packing plate will return to its up position and the bale will now be ejected.

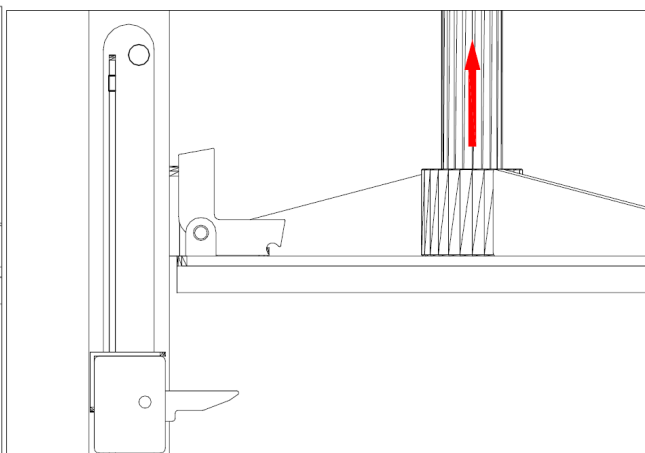
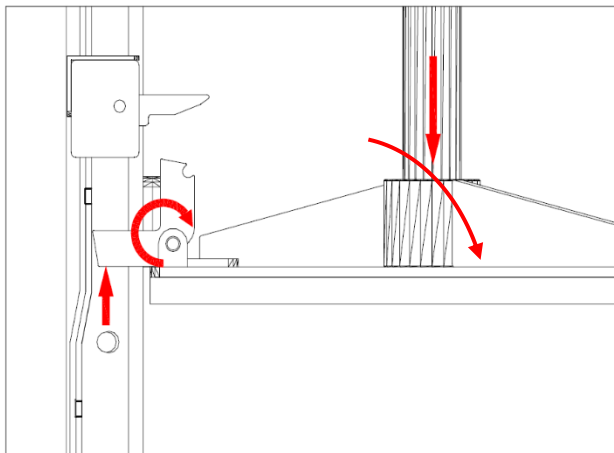
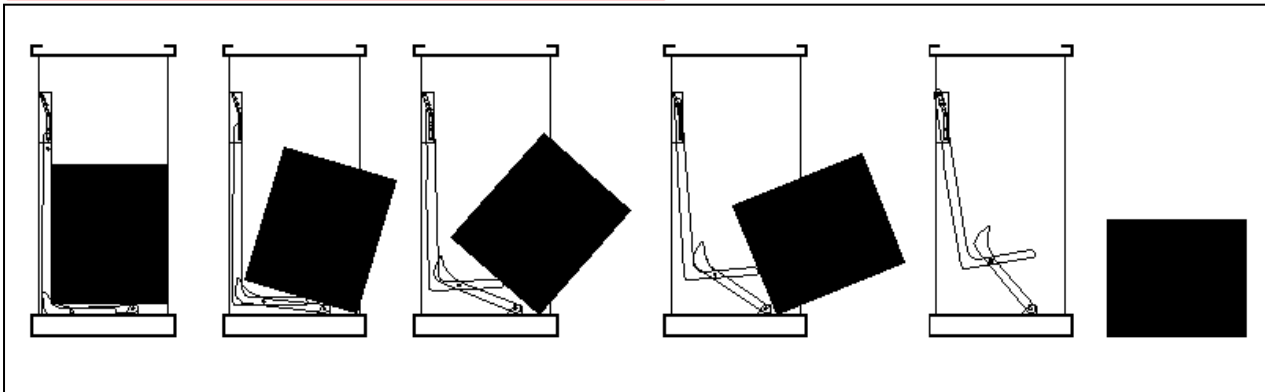
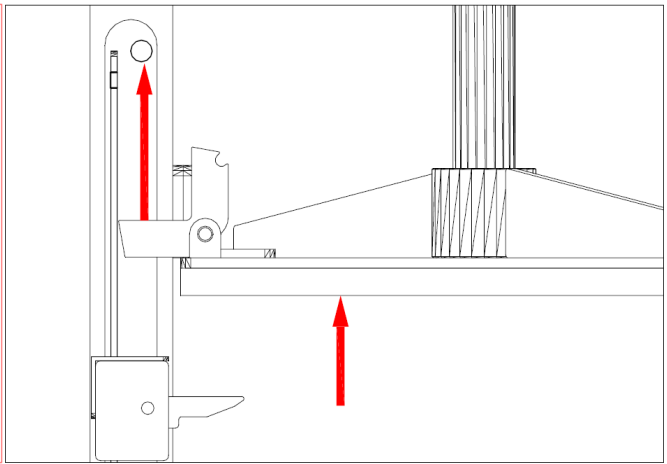
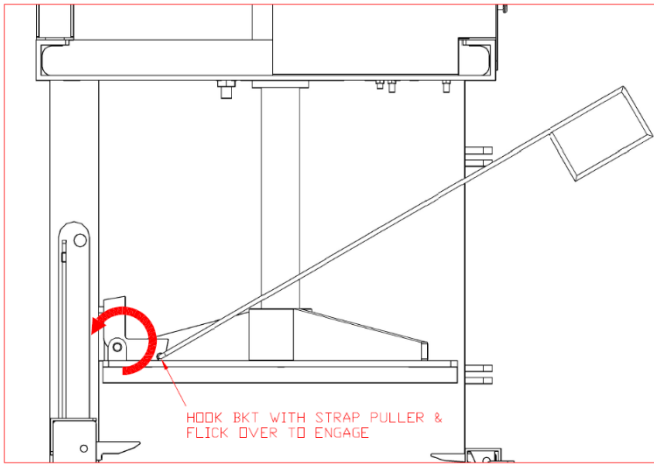
**NB: Pressing the UP & AUTO buttons together will raise the packing plate whether the door is open or closed. Please ensure that the door is fully opened when the kicking mechanism is engaged otherwise you could cause serious damage to yourself and the machine.**

**Always tie the bale with the packing plate in the fully down position.**





## OPERATING INSTRUCTIONS

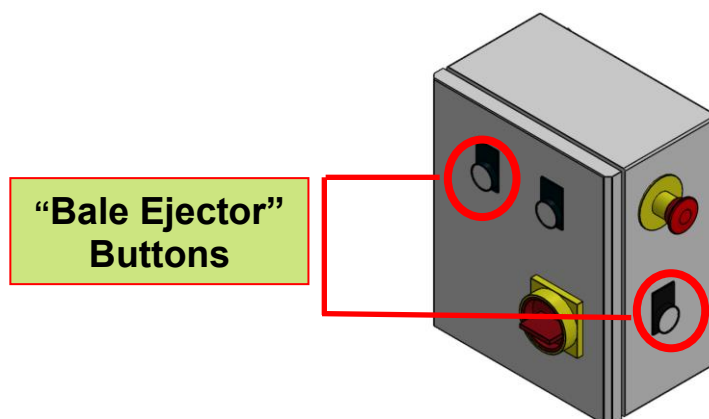


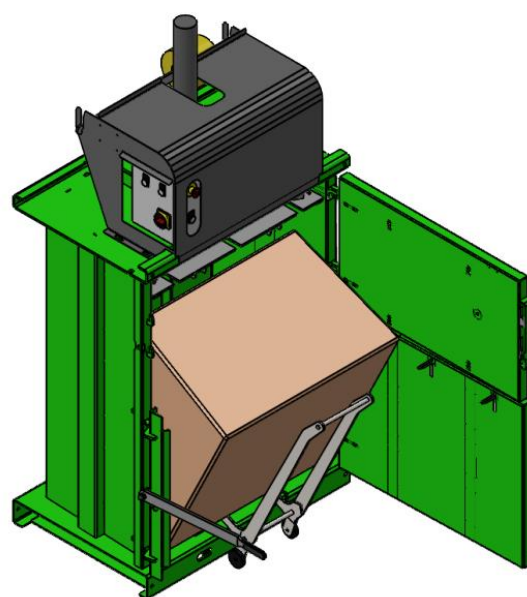
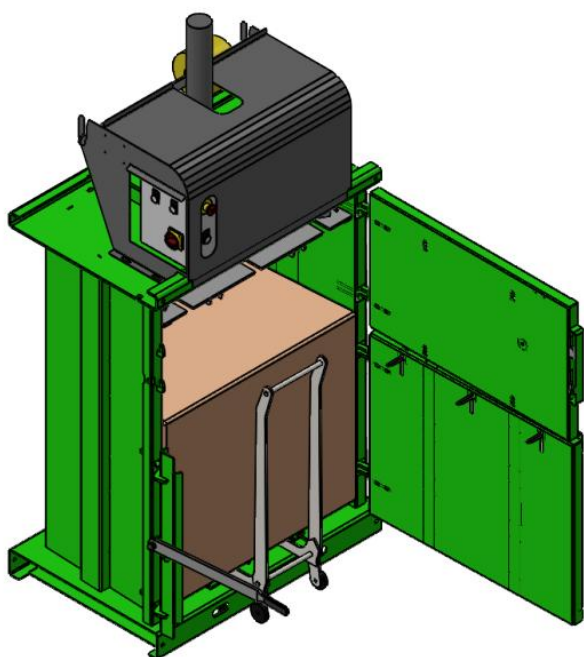
1. The bale has now been tied and is ready to be removed. Rotate the kicker trip into position as shown **using the strap puller provided**.
2. Raise the centre plate by pressing the Up & Auto buttons on the control panel.
3. The centre plate forces the kicker to eject the bale.
4. Lower the centre plate for its full stroke by pressing the down button on the control panel after the bale has been removed. This will reset the kicker trip into its normal working position.
5. Raise the centre plate to the start position by pressing the Up & Auto buttons and reset the tapes for the next bale.

**Always wear the protective gloves and goggles while using tying wire.**

## 10.6. Tying and Removing the Bale (Without Kicker)

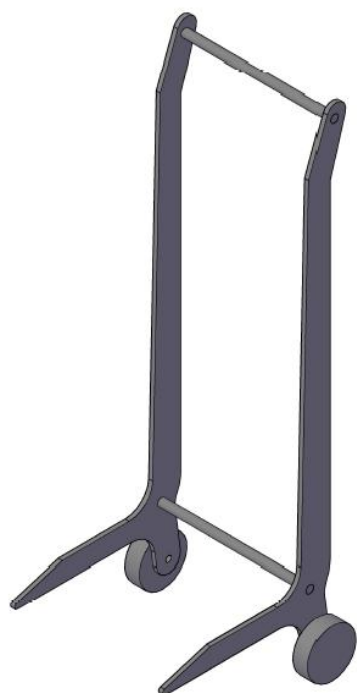
1. When the bale is complete i.e., required size is achieved, raise the centreplate into the UP position. Open the top door only. Push the strap puller into the machine until it reaches the back of the machine at each of the strap points, turn the strap puller through 90 degrees to catch the strap and pull the strap over the top of the bale.
2. Pull the straps down the front of the machine and cut the end of the tape that you have just pulled, making sure it's long enough to feed through the loops on the other end of the strap (fixed to the base) + an extra 300-400mm.
3. Close the top door and recompress the bale. Open both top and bottom door.
4. Un-loop the strap from the base. Feed the end of the strap that has just been cut, through the end with the loop. Pull tight and tie off.
5. **Once the bale has been tied, check that the doors are fully opened as the bale will not eject unless they are.**
6. Press the 'UP' button & the 'AUTO' button on the control panel simultaneously.  
**Note these buttons must be pressed within 0.5 seconds of each other or machine will not work.** The packing plate will return to its up position. Check that the doors are fully opened. The bale can now be removed. ***To remove the bale, insert the bale trolley under the bale whilst it is in the baler. Place your hand on top of the bale and tilt the trolley backwards using the hand on top of the bale to help guide the bale out of the baler. NB: Always tie the bale with the packing plate in the fully down position.***



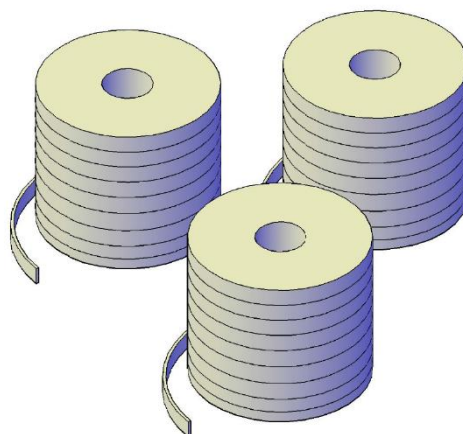


## Optional Extras

## Consumables



Trolley for Removing Bales



Baling Tapes

## 11. CUSTOMER RESPONSIBILITIES

When installing, operating, and maintaining your baler the customer is responsible for:

- Ensuring that the power requirements for the machine are satisfactory and that installation of the plug and socket are carried out in accordance with the country of use's electrical standards.
- Ensuring that **ALL personnel** using the baler have read the operator's manual and understood all of the safety and operational procedures.
- Ensuring that personnel have access to the operator's manual at all times.
- Ensuring that the electrical cable from the machine to the mains is located in a safe position out of harm's way and does not pose any hazards to the operator.
- Ensuring that the baler is plugged directly to the mains supply without the use of an extension cable.
- Supplying M12x50 rawl or other suitable fixings to fix machine to the ground or wall.
- Supplying a lock for the top door to prevent unauthorised use.

## 12. DESIGNATED USE OF MACHINE



The Material Balers are exclusively designed as Material Balers to compact only certain waste material. It is suitable **ONLY** to be used with the following materials:

**Cardboard, Paper, Plastic, Foam and Soft Materials.**

The Material Baler is **NOT SUITABLE** for any of the following types of waste:

**Pressurised containers, Cans, Metal, Wood, Glass or any Solid Materials.**

LSM Engineering Ltd will not be held responsible for any loss or damage resulting from machine applications other than those specified. Any other use the machine may be put to is entirely at the owners / operators risk.

The designated use of an LSM Material Baler precludes that the operation, maintenance and repair instructions as given by the manufacturer will be strictly fulfilled.

Any alterations made to this machine by the customer / user, especially interference with safety guards and equipment could mean the Declaration of Conformity on this machine losing its validity, as well as your warranty.



## 13. CARE AND MAINTENANCE

In order to maintain your machine in peak working order, it is necessary to carry out routine maintenance. As pointed out in the Safety section of this manual, no other material than that specified is to be compacted. These materials are as follows:

- **Cardboard, Paper, Plastic, Foam and Soft Materials.**

### A. Correct Maintenance and Inspection Procedures

- a. Learn how to service your machine correctly
- b. Follow the correct maintenance and inspection procedures shown in this manual
- c. Inspect machine daily before starting
- d. Check for loose or missing parts

If there is a problem with your machine, contact LSM Engineering Ltd Service Dept.

### B. Recommended Maintenance

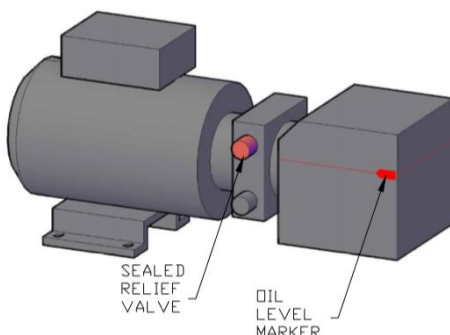
The following is a maintenance list recommended to you by LSM Engineering Ltd to ensure your machine is kept in peak condition. Due to its simplistic design, the V4, V5 & V8 balers requires little maintenance.

Before any maintenance procedures are performed, please ensure that the centre plate is in the fully down position. This is for your safety and shall protect you in the event of a hydraulic hose failing.

The following weekly maintenance is recommended:

- a. Oil any door hinges or moving latches with WD40 / Grease.
- b. Check tightness on all nuts and bolts after the first use and afterwards on a weekly basis. If loose, contact the LSM Service Department for torque settings.
- c. Check oil level and check for any oil leaks.
- d. Keep machine clean.
- e. Keep top of packing plate free of debris.

- **Use Only Hydraulic Oil of Types: HYD 32 or 68.**



- The motor has an oil fill level indicator on the tank
- The motor is supplied with a sealed relief valve. ONLY LSM personnel or their authorised dealers are allowed to adjust this valve and will replace the seal if such work must be done.  
Tampering with this seal may void your warranty.

**Note – Use only genuine LSM spare parts.**

**Note – In order to maximise the life of your LSM Baler it should receive a full service once a year. Contact the LSM Service Department or your local distributor to arrange your service dates.**



## 14. MALFUNCTION CAUSE AND REMEDY

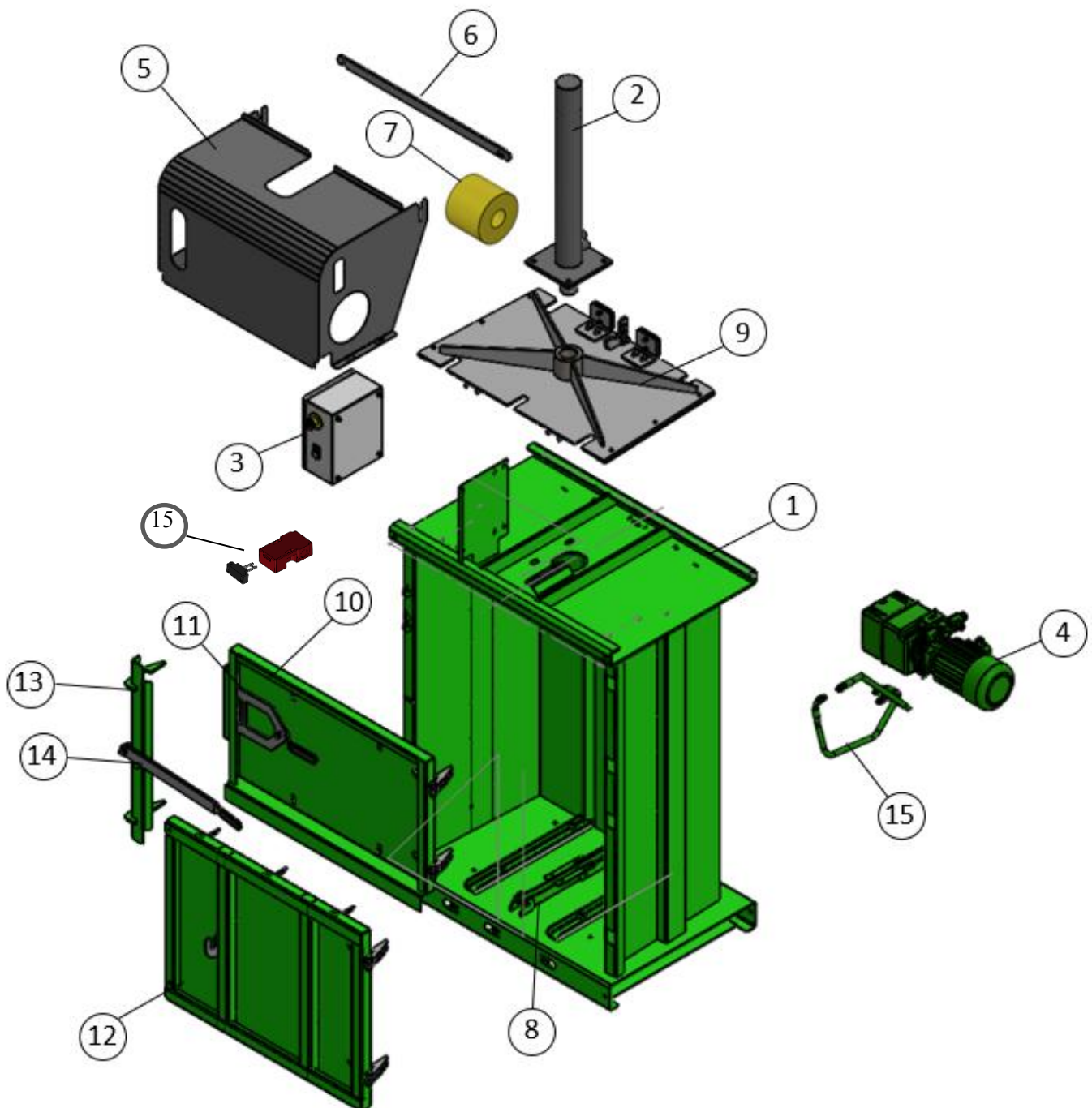
If your machine is not operating correctly, it is generally due to a loss in electrical power or oil pressure.

Follow the guidelines below to help eliminate the problem.

| PROBLEM                                                                  | CAUSE                                                                                                                                            | REMEDY                                                                                                                                                                                             |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No Electrical Power                                                      | Power on switch is turned off,<br><br>Machine is not plugged in.<br><br>Fuse is blown<br><br><br><br>MCB has tripped<br><br>Overload has tripped | Turn switch to <b>ON</b> .<br><br>Plug in machine<br><br>Check if the fuse has blown and replace if necessary. <b>NB. Always use the correct amp fuse</b><br><br>Reset MCB.<br><br>Reset overload. |
| Power is on but ram will not move up or down                             | Door is not closed properly<br><br><br><br><br>The emergency stop Button is pushed in                                                            | Ensure the door is closed properly. <b>NB. The Auto/Ready light will be illuminated.</b><br><br>Reset the emergency stop and start again                                                           |
| Door is open but can't get the packing plate to rise and eject the bale. |                                                                                                                                                  | Push the Up & Auto buttons together within 0.5 sec.                                                                                                                                                |
| Loose Bales                                                              |                                                                                                                                                  | Check that all slack was removed from the bale prior to tying<br><br>Was the bale tied with the piston in the fully down position?<br><br>Was the bale evenly loaded?                              |

***If a problem still exists contact LSM service dept. on Freephone number: 1890 456 456. Or email: [info@lsmltd.com](mailto:info@lsmltd.com) or contact your local distributor.***

## 15. V4/V5/V8 PARTS LIST





## V4/V5/V8 PARTS LIST

### V4 PART LIST

| ITEM No. | PART No. V4    | QUANTITY | PART DESCRIPTION      | LENGTH X WIDTH X HEIGHT (MM) | WEIGHT (KG) |
|----------|----------------|----------|-----------------------|------------------------------|-------------|
| 1        | 250-BD-00-000  | 1        | BODY ASSEMBLY         | 765 X 682 X 1422             | 141         |
| 2        | 350-RAM-01-001 | 1        | RAM                   | 750 X 230 X 230              |             |
| 15       | LSM 8110       | 1        | HYDRAULIC HOSE KIT    | 280 X 400 X 40               | 1.2         |
| 3        | LSM 7027       | 1        | ELECTRICAL PANEL      | 280 X 220 X 390              | 7.2         |
| 4        | LSM 9186       | 1        | MOTOR                 | 601 X 229 X 246              | 22.55       |
| 5        | 250-GU-01-000  | 1        | TOP GUARD             | 700 X 540 X 49               | 12          |
| 6        | 250-GU-02-001  | 1        | SPOOL HOLDER ASSEMBLY | 760 X 8 X 40                 | 1.8         |
| 7        | 13mm SPOOL     | 1        | SPOOLS (STRAPING)     | 190 X 190 X 140              | 2.5         |
| 8        | 250-BD-04-000  | 1        | KICKER ASSEMBLY       | 458 X 937 X 53               | 9           |
| 9        | 250-CP-01-000  | 1        | CENTRE PLATE          | 626 X 387 X 130              | 22.1        |
| 10       | 250-TDR-01-000 | 1        | TOP DOOR              | 720 X 650 X 90               | 17.6        |
| 11       | LSM 3001       | 1        | TOP DOOR HANDLE       | 455 X 195 X 60               | 2.4         |
| 12       | 250-BDR-00-000 | 1        | BOTTOM DOOR           | 820 X 710 X 80               | 25          |
| 13       | 250-CL-00-000  | 1        | CLASP                 | 120 X 190 X 685              | 5           |
| 14       | LSM 3013       | 1        | CLASP HANDLE          | 490 X 46 X 35                | 1           |
| 15       | LSM 3159       | 1        | SWITCH                | 100 X 40 X 52                | 0.2         |

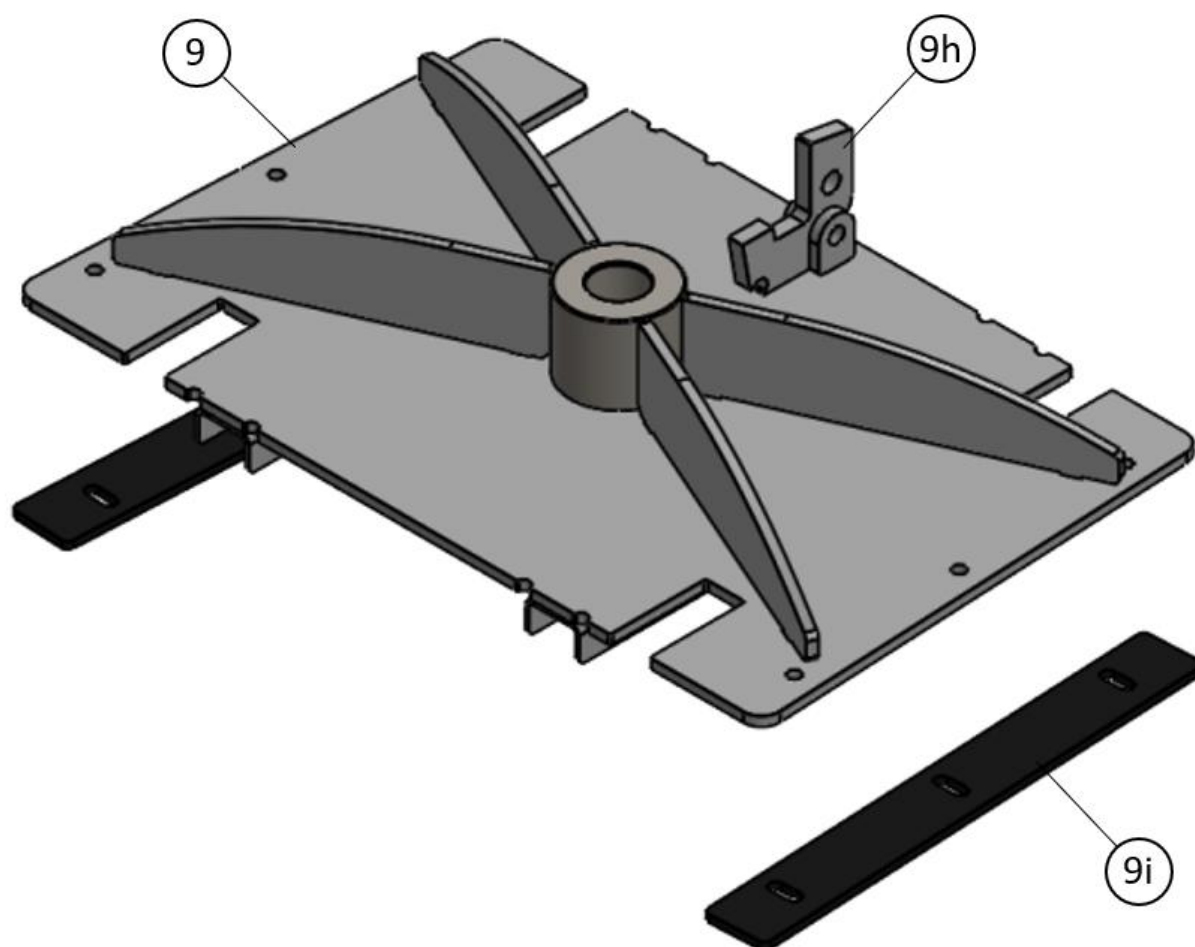
### V5 PART LIST

| ITEM No. | PART No. V5      | QUANTITY | PART DESCRIPTION      | LENGTH X WIDTH X HEIGHT (MM) | WEIGHT (KG) |
|----------|------------------|----------|-----------------------|------------------------------|-------------|
| 1        | 350-BD-00-000    | 1        | BODY ASSEMBLY         | 865 X 660 X 1740             | 162         |
| 2        | 350- RAM -01-001 | 1        | RAM                   | 750 X 230 X 230              |             |
| 15       | LSM 8110         | 1        | HYDRAULIC HOSE KIT    | 280 X 400 X 40               | 1.2         |
| 3        | LSM 7027         | 1        | ELECTRICAL PANEL      | 280 X 220 X 390              | 7.2         |
| 4        | LSM 9186         | 1        | MOTOR                 | 601 X 229 X 246              | 22.55       |
| 5        | 350-GU-01-000    | 1        | TOP GUARD             | 860 X 540 X 495              | 16          |
| 6        | 350-GU-02-001    | 1        | SPOOL HOLDER ASSEMBLY | 860 X 40 X 8                 | 2           |
| 7        | 13mm SPOOL       | 1        | SPOOLS (STRAPING)     | 190 X 190 X 140              | 2.5         |
| 8        | 350-BD-04-000    | 1        | KICKER ASSEMBLY       | 560 X 875 X 80               | 10          |
| 9        | 350-CP-01-000    | 1        | CENTRE PLATE          | 740 X 490 X 130              | 30          |
| 10       | 350-TDR-01-000   | 1        | TOP DOOR              | 850 X 650 X 90               | 18.5        |
| 11       | LSM 3001         | 1        | TOP DOOR HANDLE       | 455 X 195 X 60               | 2.4         |
| 12       | 350-BDR-00-000   | 1        | BOTTOM DOOR           | 820 X 710 X 80               | 25          |
| 13       | 350-CL-01-000    | 1        | CLASP                 | 120 X 190 X 685              | 5           |
| 14       | LSM 3013         | 1        | CLASP HANDLE          | 490 X 46 X 35                | 1           |
| 15       | LSM 3159         | 1        | SWITCH                | 100 X 40 X 52                | 0.2         |

### V8 PART LIST

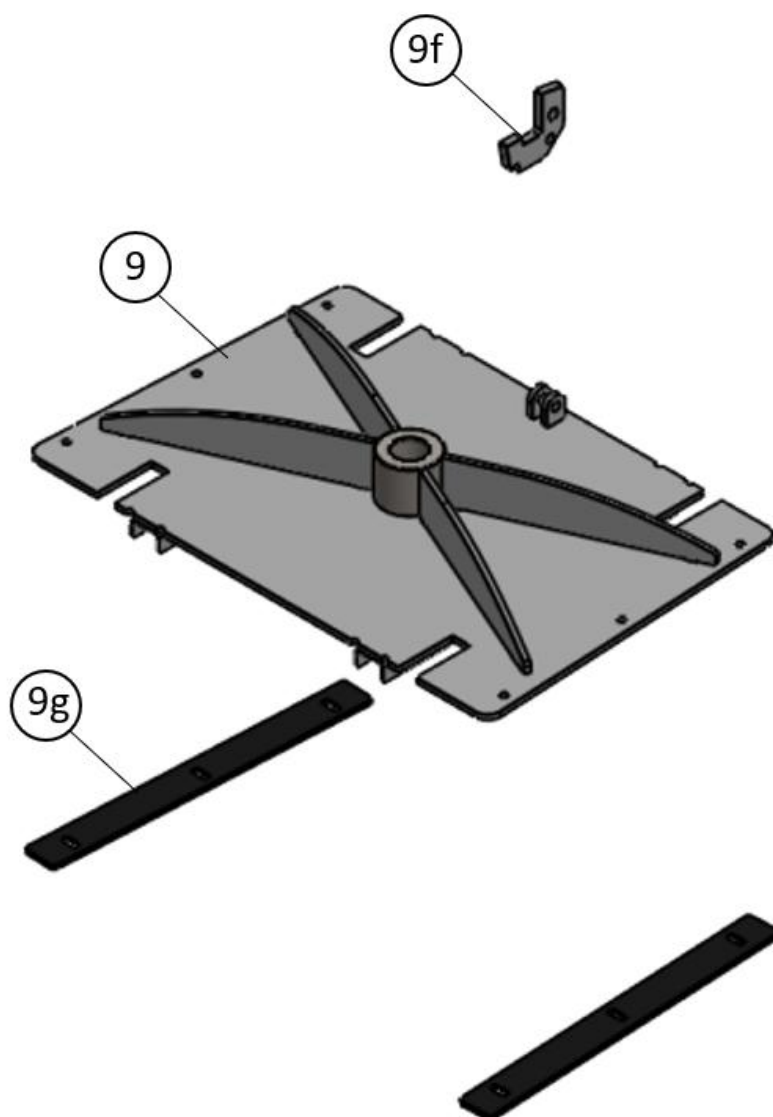
| ITEM No. | PART No. V8    | QUANTITY | PART DESCRIPTION      | LENGTH X WIDTH X HEIGHT (MM) | WEIGHT (KG) |
|----------|----------------|----------|-----------------------|------------------------------|-------------|
| 1        | 450-BD-00-000  | 1        | BODY ASSEMBLY         | 1100 X 730 X 1840            | 225         |
| 2        | 450-RAM-01-001 | 1        | RAM                   | 880 X 230 X 230              |             |
| 15       | LSM 8110       | 1        | HYDRAULIC HOSE KIT    | 280 X 400 X 40               | 1.2         |
| 3        | LSM 7027       | 1        | ELECTRICAL PANEL      | 280 X 220 X 390              | 7.2         |
| 4        | LSM 9186       | 1        | MOTOR                 | 601 X 229 X 246              | 22.55       |
| 5        | 350-GU-01-000  | 1        | TOP GUARD             | 860 X 540 X 495              | 16          |
| 6        | 350-GU-02-001  | 1        | SPOOL HOLDER ASSEMBLY | 860 X 40 X 8                 | 2           |
| 7        | 13mm SPOOL     | 1        | SPOOLS (STRAPING)     | 190 X 190 X 140              | 2.5         |
| 8        | 450-BD-04-000  | 1        | KICKER ASSEMBLY       | 630 X 1140 X 80              | 12          |
| 9        | 450-CP-01-000  | 1        | CENTRE PLATE          | 740 X 490 X 130              | 50          |
| 10       | 450-TDR-01-000 | 1        | TOP DOOR              | 850 X 650 X 90               | 18.5        |
| 11       | LSM 3001       | 1        | TOP DOOR HANDLE       | 455 X 195 X 60               | 2.4         |
| 12       | 450-BDR-00-000 | 1        | BOTTOM DOOR           | 820 X 710 X 80               | 25          |
| 13       | 450-CL-01-000  | 1        | CLASP                 | 120 X 190 X 685              | 5           |
| 14       | 450-CL-03-001  | 1        | CLASP HANDLE          | 100 X 86 X 86                | 0.9         |
| 15       | LSM 3159       | 1        | SWITCH                | 100 X 40 X 52                | 0.2         |

## 15.1. V4 Centreplate Assembly



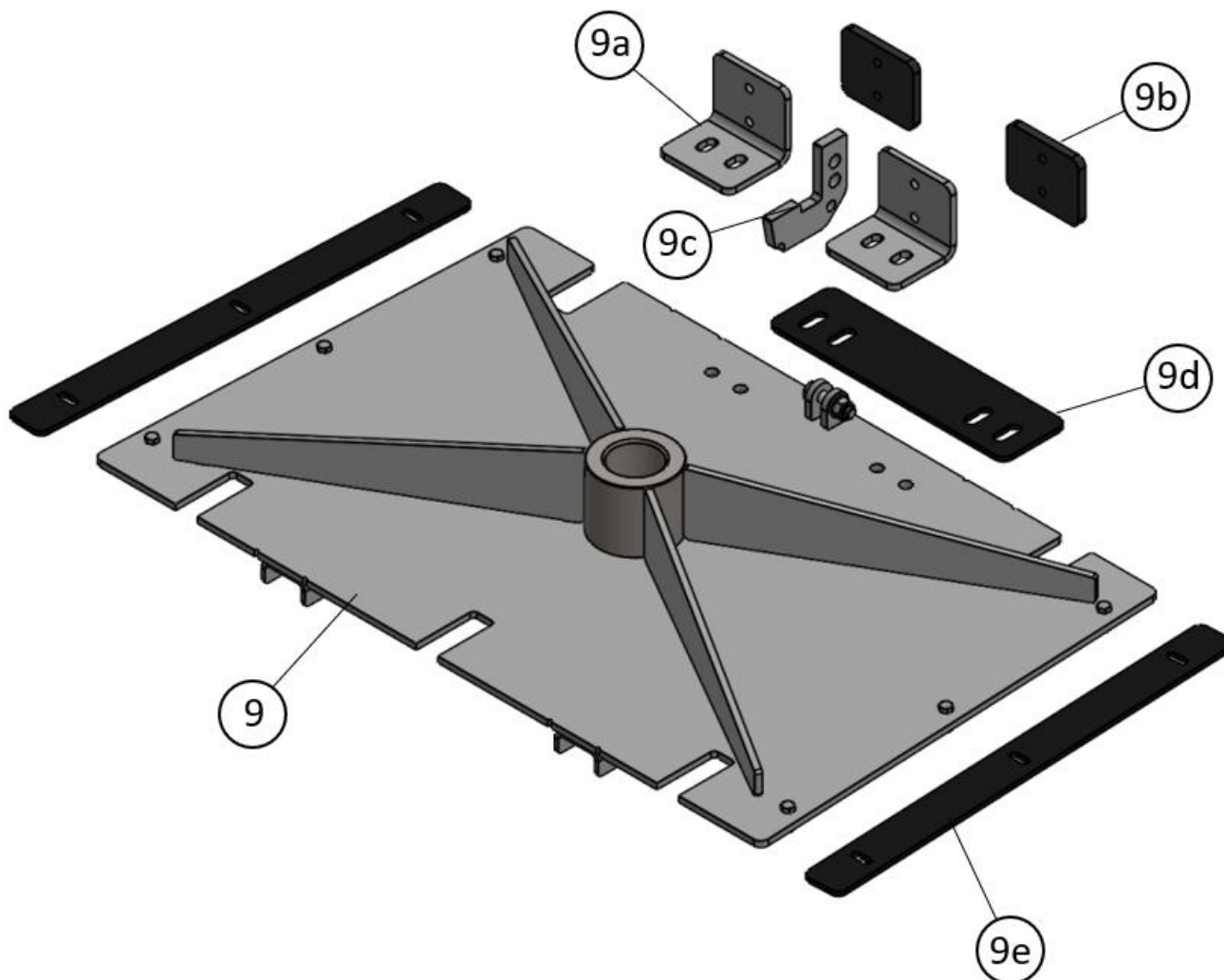
| ITEM No. | PART No. V4   | QUANTITY | PART DESCRIPTION   | LENGTH X WIDTH X HEIGHT (MM) | WEIGHT (KG) |
|----------|---------------|----------|--------------------|------------------------------|-------------|
| 9        | 250-CP-01-000 | 1        | CENTRE PLATE       | 626 X 387 X 130              | 22.1        |
| 9h       | LSM-3526      | 1        | KICKER TRIP        | 92 X 90 X 12                 | 0.4         |
| 9i       | LSM-3170      | 2        | V4 CP SIDE SCRAPER | 387 X 50 X 6                 | 0.15        |

## 15.2. V5 Centreplate Assembly



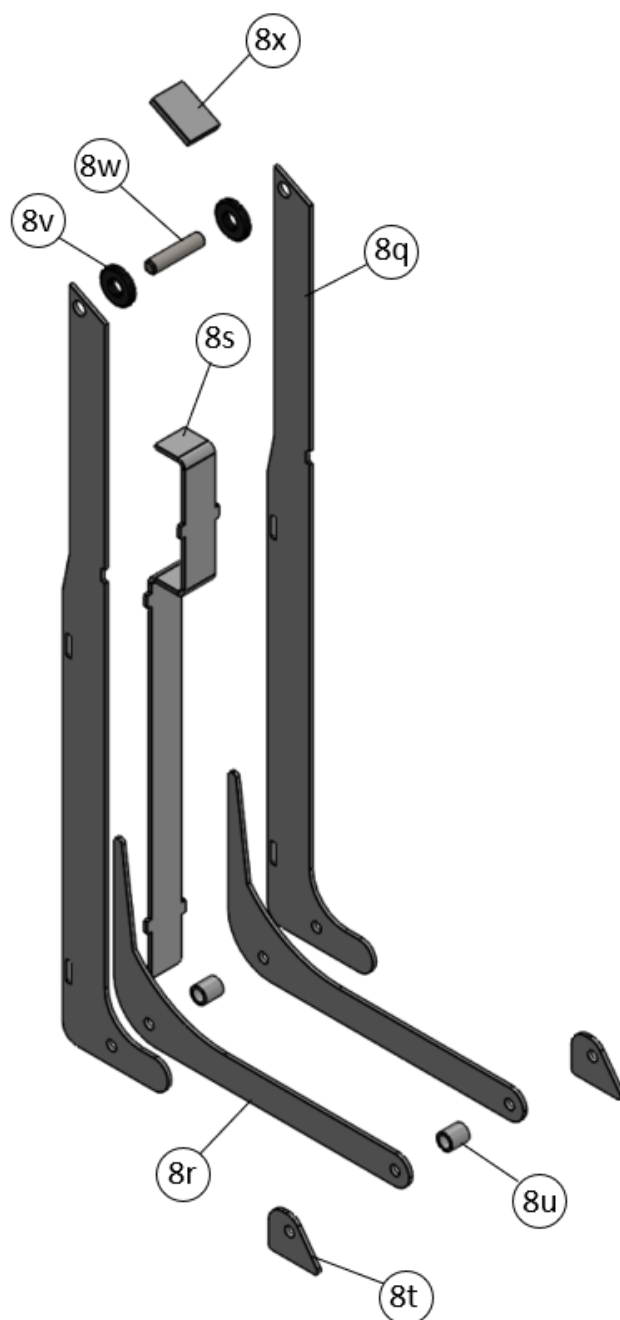
| ITEM No. | PART No. V5   | QUANTITY | PART DESCRIPTION   | LENGTH X WIDTH X HEIGHT (MM) | WEIGHT (KG) |
|----------|---------------|----------|--------------------|------------------------------|-------------|
| 9        | 350-CP-01-000 | 1        | CENTRE PLATE       | 740 X 490 X 130              | 30          |
| 9f       | 350-CP-02-000 | 1        | KICKER TRIP        | 92 X 90 X 12                 | 0.4         |
| 9g       | LSM-3060      | 2        | V8 CP SIDE SCRAPER | 485 X 50 X 6                 | 0.19        |

### 15.3. V8 Centreplate assembly



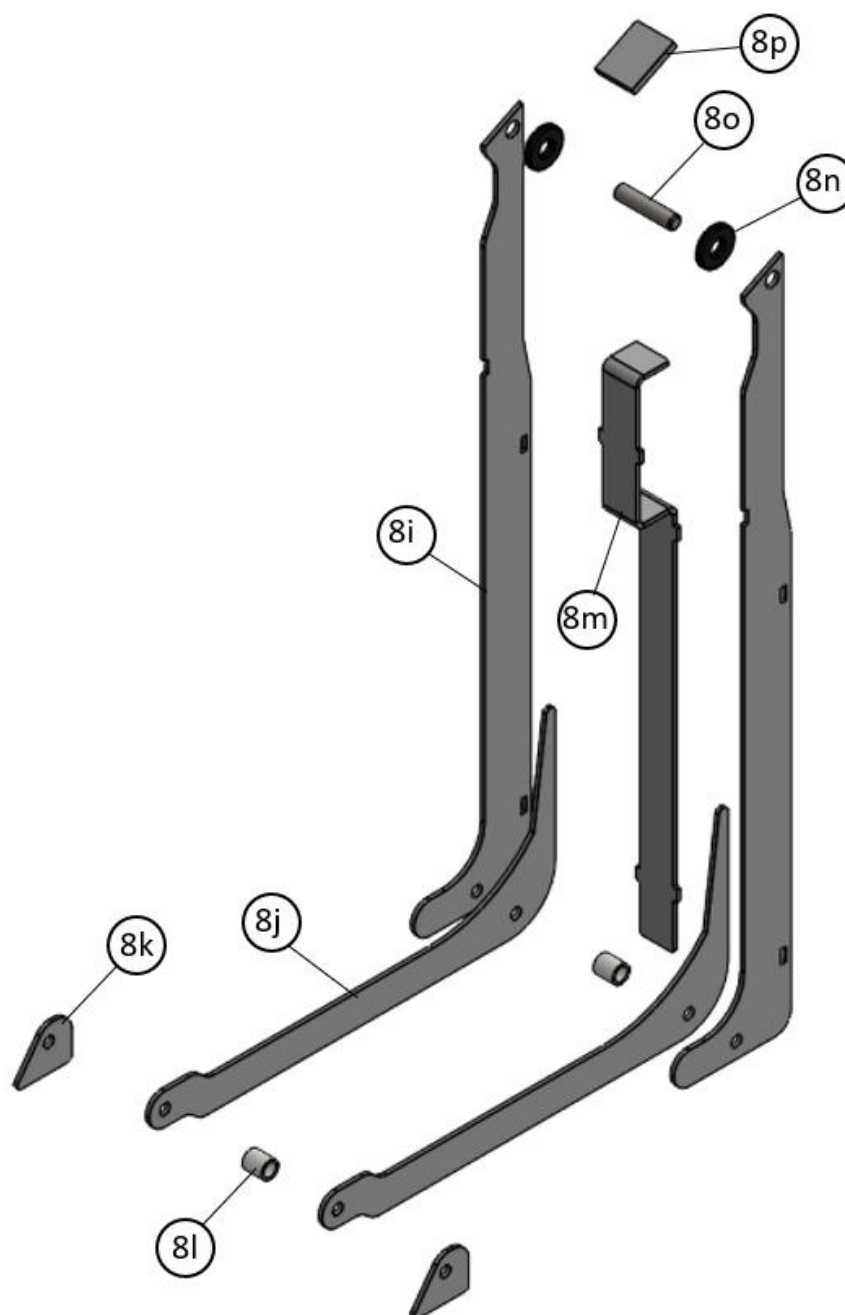
| ITEM No. | PART No. V8   | QUANTITY | PART DESCRIPTION                 | LENGTH X WIDTH X HEIGHT (MM) | WEIGHT (KG) |
|----------|---------------|----------|----------------------------------|------------------------------|-------------|
| 9        | 450-CP-01-000 | 1        | CENTRE PLATE                     | 740 X 490 X 130              | 50          |
| 9a       | 450-CP-03-001 | 2        | PACKING PLATE STABLIZER          | 100 X 86 X 86                | 0.9         |
| 9b       | 450-CP-03-003 | 2        | PACKING PLATE STABLIZER<br>NYLON | 100 X 80 X 10                | 0.1         |
| 9c       | 450-CP-02-000 | 1        | KICKER TRIP                      | 105 X 98 X 12                | 0.5         |
| 9d       | 450-CP-03-009 | 1        | V8 CP BACK SCRAPER<br>NYLON      | 330 X 90 X 6                 | 0.25        |
| 9e       | 450-CP-03-008 | 2        | V8 CP SIDE SCRAPER               | 580 X 50 X 6                 | 0.24        |

## 15.4. V4 Kicker Assembly



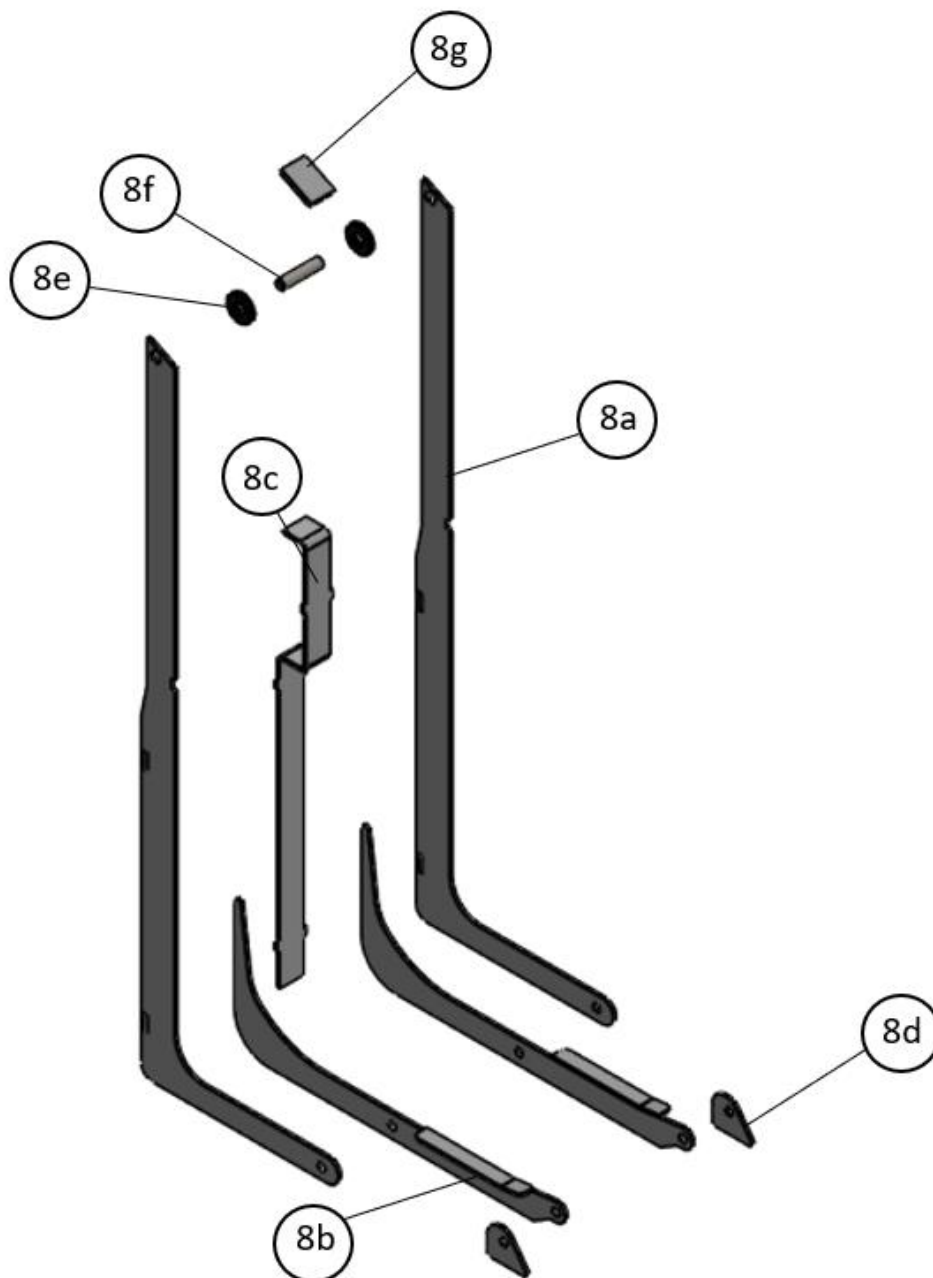
| ITEM No. | PART No. V4   | QUANTITY | PART DESCRIPTION     | LENGTH X WIDTH X HEIGHT (MM) | WEIGHT (KG) |
|----------|---------------|----------|----------------------|------------------------------|-------------|
| 8q       | 250-BD-04-002 | 2        | V8 KICKER LEG        |                              |             |
| 8r       | 250-BD-04-001 | 2        | V8 KICKER FOOT       |                              |             |
| 8s       | LSM3151       | 1        | KICKER HINGE POINT   |                              |             |
| 8t       | 250-BD-04-008 | 2        | KICKER BOLT SPACER   |                              |             |
| 8u       | 250-BD-04-004 | 2        | V8 KICKER LEG SPACER | 25 X 21 X 21                 | 0.01        |
| 8v       | 450-KR-01-001 | 2        | KICKER ROLLER        | 45 X 45 X 8                  | 0.12        |
| 8w       | 450-KR-01-002 | 1        | KICKER ROLLER PIN    |                              |             |
| 8x       | 250-BD-04-003 | 1        | KICKER LIFT PLATE    |                              |             |

## 15.5. V5 Kicker Assembly



| ITEM No. | PART No. V5   | QUANTIT Y | PART DESCRIPTION     | LENGTH X WIDTH X HEIGHT (MM) | WEIGHT (KG) |
|----------|---------------|-----------|----------------------|------------------------------|-------------|
| 8i       | 350-BD-04-002 | 2         | V8 KICKER LEG        |                              |             |
| 8j       | 350-BD-04-001 | 2         | V8 KICKER FOOT       |                              |             |
| 8k       | LSM3151       | 1         | KICKER HINGE POINT   |                              |             |
| 8l       | 350-BD-04-008 | 2         | KICKER BOLT SPACER   |                              |             |
| 8m       | 350-BD-04-004 | 2         | V8 KICKER LEG SPACER | 25 X 21 X 21                 | 0.01        |
| 8n       | 450-KR-01-001 | 2         | KICKER ROLLER        | 45 X 45 X 8                  | 0.12        |
| 8o       | 450-KR-01-002 | 1         | KICKER ROLLER PIN    |                              |             |
| 8p       | 350-BD-04-003 | 1         | KICKER LIFT PLATE    |                              |             |

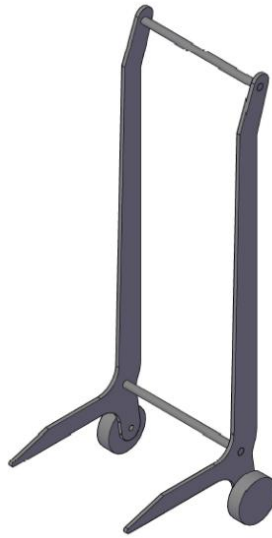
## 15.6. V8 Kicker Assembly



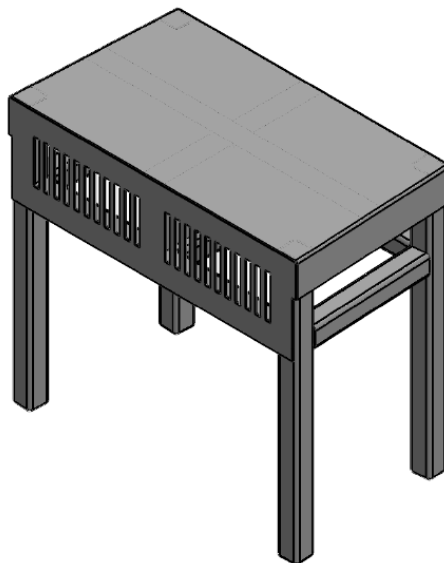
| ITEM No. | PART No. V8   | QUANTITY | PART DESCRIPTION     | LENGTH X WIDTH X HEIGHT (MM) | WEIGHT (KG) |
|----------|---------------|----------|----------------------|------------------------------|-------------|
| 8a       | 450-BD-04-002 | 2        | V8 KICKER LEG        |                              |             |
| 8b       | 450-BD-04-001 | 2        | V8 KICKER FOOT       |                              |             |
| 8c       | 450-BD-04-004 | 1        | V8 KICKER LEG SPACER |                              |             |
| 8d       | LSM3151       | 2        | KICKER HINGE POINT   |                              |             |
| 8e       | 450-KR-01-001 | 2        | KICKER ROLLER        | 45 X 45 X 8                  | 0.12        |
| 8f       | 450-KR-01-002 | 1        | KICKER ROLLER PIN    |                              |             |
| 8g       | 450-BD-04-003 | 1        | KICKER LIFT PLATE    |                              |             |



## 15.7 Optional Extra's



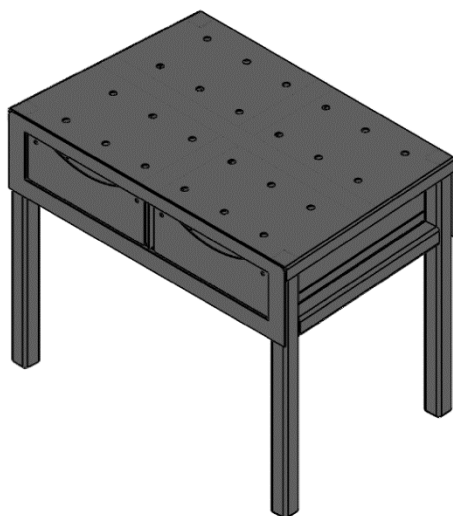
| ITEM NO. | PART NO.     | QUANTITY | PART DESCRIPTION | LENGTH X WIDTH X HEIGHT (MM) | WEIGHT (KG) |
|----------|--------------|----------|------------------|------------------------------|-------------|
| 1        | BALE TROLLEY | 1        | BALE TROLLEY     | 320 X 1030 X 400             | 17 KG       |



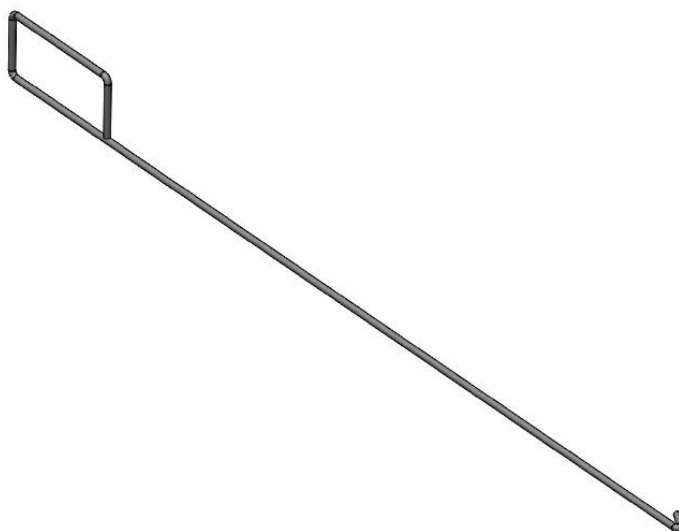
| ITEM NO. | PART NO.         | QUANTITY | PART DESCRIPTION                | LENGTH X WIDTH X HEIGHT (MM) | WEIGHT (KG) |
|----------|------------------|----------|---------------------------------|------------------------------|-------------|
| 1        | V4-BRDNDT-01-001 | 1        | V4 BALE REDUCER<br>NO DRIP TRAY | 600 X 340 X 550              | 23.6        |
| 1        | V5-BRDNDT-01-001 | 1        | V5 BALE REDUCER<br>NO DRIP TRAY | 740 X 485 X 573              | 29.7        |
| 1        | V8-BRDNDT-01-001 | 1        | V8 BALE REDUCER<br>NO DRIP TRAY | 940 X 590X 600               | 33          |



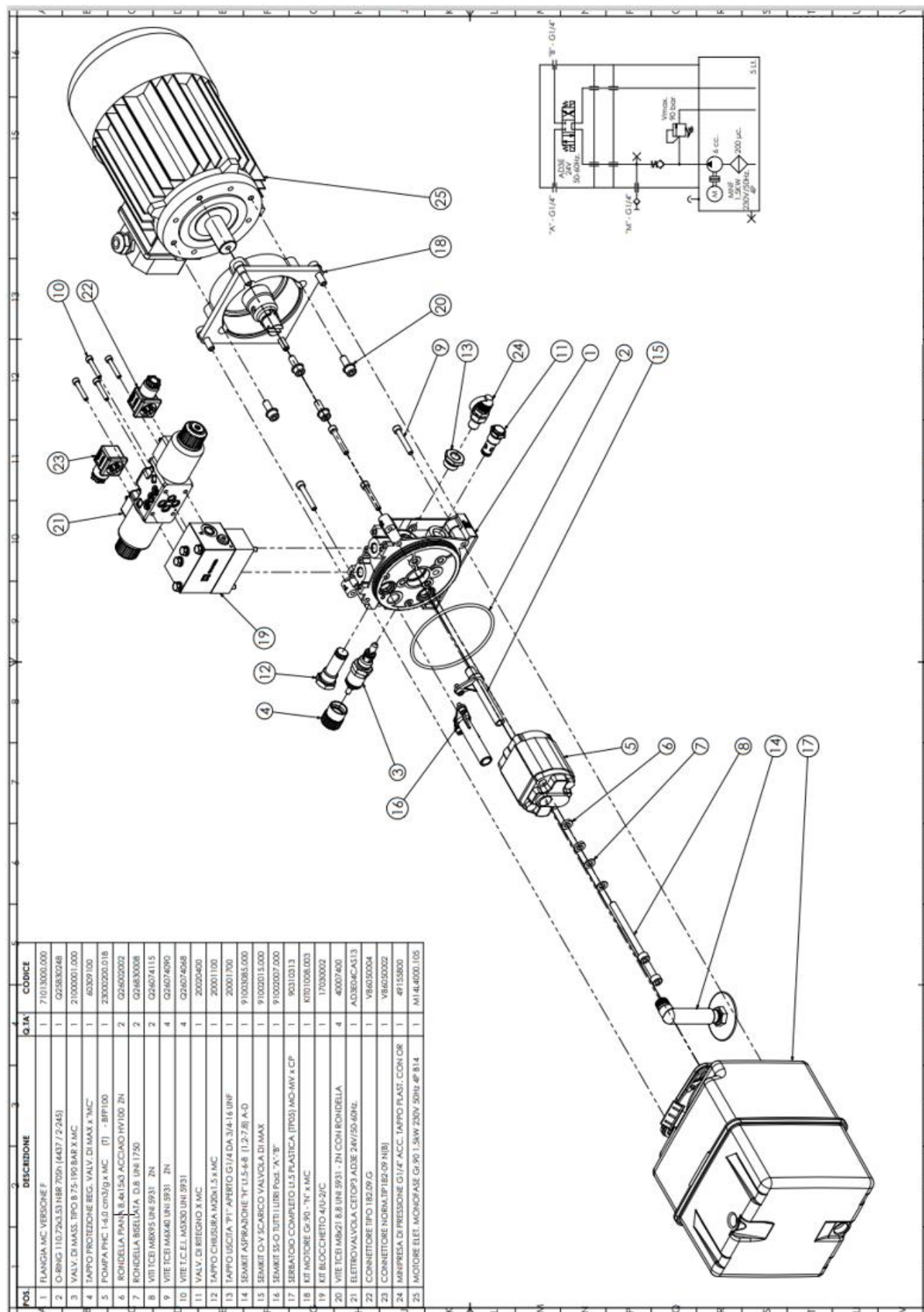
## V4/V5/V8 PARTS LIST



| ITEM NO. | PART NO.        | QUANTITY | PART DESCRIPTION               | LENGTH X WIDTH X HEIGHT (MM) | WEIGHT (KG) |
|----------|-----------------|----------|--------------------------------|------------------------------|-------------|
| 1        | V4-BRDDT-01-001 | 1        | V4 BALE REDUCER WITH DRIP TRAY | 600 X 340 X 550              | 25.6        |
| 1        | V5-BRDDT-01-001 | 1        | V5 BALE REDUCER WITH DRIP TRAY | 740 X 485 X 573              | 31.7        |
| 1        | V8-BRDDT-01-001 | 1        | V8 BALE REDUCER WITH DRIP TRAY | 940 X 590X 600               | 35          |



| ITEM NO. | PART NO.               | QUANTITY | PART DESCRIPTION       | LENGTH X WIDTH X HEIGHT (MM) | WEIGHT (KG) |
|----------|------------------------|----------|------------------------|------------------------------|-------------|
| 1        | V4,V5 & V8 WIRE PULLER | 1        | V4,V5 & V8 WIRE PULLER | 890 X 110 X 30               | 2 Kg        |



| POS. | DESCRIZIONE                                            | Q.TA. | CODICE       |
|------|--------------------------------------------------------|-------|--------------|
| 1    | FLANGIA MC, VERSIONE F                                 | 1     | 71013000.000 |
| 2    | O-RING 110.7243.53 NBR 7059 (1437 / 2.245)             | 1     | 025830248    |
| 3    | VALV. DI MASS. TIPO B 75-198 BAR X MC                  | 1     | 21000001.000 |
| 4    | TAPPO PROTEZIONE REG. VALV. DI MASS. X MC              | 1     | 60309100     |
| 5    | POMPA PHC 14.0 cm <sup>3</sup> /g x MC (I) - BPI100    | 1     | 23000200.018 |
| 6    | RONDELLA PAN. 8.461543 ACCIAIO HV100 ZN                | 2     | 026002002    |
| 7    | RONDELLA BIELLA D.B. UNI 1750                          | 2     | 026830008    |
| 8    | VITI TCEI M8X95 UNI 5931 - ZN                          | 2     | 026074115    |
| 9    | VITE TCEI M8X40 UNI 5931 - ZN                          | 4     | 026074090    |
| 10   | VITE T.C.E. M5X30 UNI 5931                             | 4     | 026074268    |
| 11   | VALV. DI RIEGNO X MC                                   | 1     | 20005400     |
| 12   | TAPPO CHIUSURA M20X1.5 X MC                            | 1     | 20001100     |
| 13   | TAPPO USCITA "P1" APERTO G1/4 DA 3/4-1/4 UNF           | 1     | 20001700     |
| 14   | SEAMIT ASPIRAZIONE "P1" 11.5-6.8 (1.27 B) A-O          | 1     | 91003085.000 |
| 15   | SEAMIT O-V SCARICO VALVOLA DI MASS                     | 1     | 91002015.000 |
| 16   | SEAMIT SSO TUTTI I LITRI POS. "A" "B"                  | 1     | 91002007.000 |
| 17   | SERBATOIO COMPLETO 1.5 PLASTICA (TPG) MO-MV X CF       | 1     | 90310313     |
| 18   | KIT MOTORE Gx 90 - "N" X MC                            | 1     | N701008.003  |
| 19   | KIT BLOCCETTO 4U-2IC                                   | 1     | 170300002    |
| 20   | VITE TCEI M8X21 8.8 UNI 5931 - ZN CON RONDELLA         | 4     | 40007400     |
| 21   | ELETTROVALVOLA CETOP3 ADDE 24V/50-60Hz                 | 1     | A0380ACAS13  |
| 22   | CONNETTORE TIPO 182.09 G                               | 1     | V84030004    |
| 23   | CONNETTORE NORMA TP 182.09 NIB                         | 1     | V84030002    |
| 24   | MANIPRESA DI PRESSIONE G1/4" ACC. TAPPO PLAST. CON ORE | 1     | 4P155800     |
| 25   | MOTORE ELET. MONOFASE Gx 90 1.5kW 230V 50Hz 4P B14     | 1     | M14L4000.105 |



## 16. LSM TRAIN THE TRAINER

### Distributor Copy

The following methods / procedures must be explained to the intended machine trainer by an LSM Representative. By signing the bottom of the sheet, the trainer is conforming that they are confident of using the machine safely

|                                                                   |     |    |  |
|-------------------------------------------------------------------|-----|----|--|
| Client                                                            |     |    |  |
| Address                                                           |     |    |  |
|                                                                   |     |    |  |
|                                                                   |     |    |  |
| Phone                                                             |     |    |  |
| Type of Machine:                                                  |     |    |  |
| Serial No(s)                                                      |     |    |  |
| Date Of Training                                                  |     |    |  |
|                                                                   | YES | NO |  |
| Correct site for machine                                          |     |    |  |
| Safe method of connecting / disconnecting power supply            |     |    |  |
| Safe use of operational controls                                  |     |    |  |
| Safe loading of machine material and appropriate material to load |     |    |  |
| Safe loading of machine strapping/wire                            |     |    |  |
| How to form a bale and tie straps/wire                            |     |    |  |
| How to safely remove the bale from the machine                    |     |    |  |
| Machine Safety features                                           |     |    |  |
| Explanation of Machine Safety decals.                             |     |    |  |
| User Manual familiarization, all areas.                           |     |    |  |

I confirm that all aspects of using the above machine have been explained to my satisfaction

**Trainee Name (Print)** \_\_\_\_\_

**Trainee Name (Sign)** \_\_\_\_\_

**Trainee Position** \_\_\_\_\_

**LSM Trainer Name (Print)** \_\_\_\_\_

**LSM Trainer Name (Sign)** \_\_\_\_\_



## LSM TRAIN THE TRAINER

### Company Copy

The following methods / procedures must be explained to the intended machine trainer by an LSM Representative. By signing the bottom of the sheet, the trainer is conforming that they are confident of using the machine safely

|                  |  |  |
|------------------|--|--|
| Client           |  |  |
| Address          |  |  |
|                  |  |  |
|                  |  |  |
| Phone            |  |  |
| Type of Machine: |  |  |
| Serial No(s)     |  |  |
| Date Of Training |  |  |

|                                                                   | YES | NO |
|-------------------------------------------------------------------|-----|----|
| Correct site for machine                                          |     |    |
| Safe method of connecting / disconnecting power supply            |     |    |
| Safe use of operational controls                                  |     |    |
| Safe loading of machine material and appropriate material to load |     |    |
| Safe loading of machine strapping/wire                            |     |    |
| How to form a bale and tie straps/wire                            |     |    |
| How to safely remove the bale from the machine                    |     |    |
| Machine Safety features                                           |     |    |
| Explanation of Machine Safety decals.                             |     |    |
| User Manual familiarization, all areas.                           |     |    |

I confirm that all aspects of using the above machine have been explained to my satisfaction

**Trainee Name (Print)** \_\_\_\_\_

**Trainee Name (Sign)** \_\_\_\_\_

**Trainee Position** \_\_\_\_\_

**LSM Trainer Name (Print)** \_\_\_\_\_

**LSM Trainer Name (Sign)** \_\_\_\_\_



## LSM TRAIN THE OPERATOR

### Customer Copy

The following methods / procedures must be explained to the intended machine operator. By signing the bottom of the sheet, the operator is conforming that they are confident of using the machine safely

|                                                                   | YES | NO |
|-------------------------------------------------------------------|-----|----|
| Safe use of operational controls                                  |     |    |
| Safe loading of machine material and appropriate material to load |     |    |
| Safe loading of machine strapping/wire                            |     |    |
| How to form a bale and tie straps                                 |     |    |
| How to safely remove the bale from the machine                    |     |    |
| Machine Safety features                                           |     |    |
| Explanation of Machine Safety decals.                             |     |    |
| User Manual familiarization, all areas.                           |     |    |

I confirm that all aspects of using the above machine have been explained to my satisfaction

**Operator Name (Print)** \_\_\_\_\_

**Operator Name (Sign)** \_\_\_\_\_

**Trainer Position** \_\_\_\_\_

**Trainer Name (Print)** \_\_\_\_\_

**Trainer Name (Sign)** \_\_\_\_\_

**Date** \_\_\_\_\_



## 17. WARRANTY AND MANUAL REGISTRATION FORMS



### Manufacturers and Suppliers of Specialist Equipment

Ballymacken, Portlaoise

R32 ATD3 Co. Laois, Ireland, Tel:

00 353 (0) 57 8660379

Fax: 00 353 (0) 57 8660597

Email: [info@lsmltd.com](mailto:info@lsmltd.com) Web:[www.lsmltd.com](http://www.lsmltd.com)

#### PLEASE COMPLETE THE FOLLOWING FORMS IN FULL.

The first form is a warranty registration form; this form is issued in accordance with our conditions of sale and with particular reference to condition 9 governing warranty conditions (See Terms and Conditions). We cannot process a claim unless all particulars are supplied.

The second is an acceptance form, which the purchaser is asked to sign to acknowledge he/she has received a copy of the Operator manual and full training for the machine purchased.

**PLEASE DO NOT SIGN IF YOU HAVE RECEIVED BOTH OF THESE**

#### WARRANTY REGISTRATION

|                             |            |
|-----------------------------|------------|
| DATE OF PURCHASE:           |            |
| PURCHASERS NAME:            | SIGNATURE: |
| ADDRESS:                    |            |
|                             |            |
| PHONE/FAX:                  |            |
| EMAIL:                      |            |
| DEALERS NAME:               |            |
|                             |            |
| DEALERS ADDRESS:            |            |
|                             |            |
| PHONE AND EMAIL:            |            |
| MACHINE TYPE AND MODEL:     |            |
| SERIAL NO:                  |            |
| APPROX NO. OF BALES WEEKLY: |            |
| NOTES:                      |            |

#### TRAINING & OPERATOR MANUAL REGISTRATION

PLEASE SIGN THE FOLLOWING DECLARATION TO STATE THAT ON THE DAY YOU (THE PURCHASER) PURCHASED YOUR MACHINE, YOU RECEIVED AN OPERATOR'S MANUAL AND TRAINING INSTRUCTIONS

I, the purchaser has received my LSM Operators manual and training from the below dealer/ installation engineer

PURCHASER \_\_\_\_\_ SIGNATURE \_\_\_\_\_  
DATE \_\_\_\_\_  
DEALER \_\_\_\_\_ SIGNATURE \_\_\_\_\_  
DATE \_\_\_\_\_

**PLEASE FAX/POST BACK TO LSM WITHIN 30 DAYS OF PURCHASE**



## WARRANTY AND MANUAL REGISTRATION FORMS



### Manufacturers and Suppliers of Specialist Equipment

Ballymacken, Portlaoise  
R32 ATD3 Co. Laois, Ireland, Tel:  
00 353 (0) 57 8660379  
Fax: 00 353 (0) 57 8660597  
Email: [info@lsmltd.com](mailto:info@lsmltd.com) Web:  
[www.lsmltd.com](http://www.lsmltd.com)

#### PLEASE COMPLETE THE FOLLOWING FORMS IN FULL.

The first form is a warranty registration form; this form is issued in accordance with our conditions of sale and with particular reference to condition 9 governing warranty conditions (See Terms and Conditions). We cannot process a claim unless all particulars are supplied.

The second is an acceptance form, which the purchaser is asked to sign to acknowledge he/she has received a copy of the Operator manual and full training for the machine purchased.

**PLEASE DO NOT SIGN IF YOU HAVE RECEIVED BOTH OF THESE**

#### WARRANTY REGISTRATION

|                            |            |
|----------------------------|------------|
| DATE OF PURCHASE:          |            |
| PURCHASERS NAME:           | SIGNATURE: |
| ADDRESS:                   |            |
|                            |            |
| PHONE/FAX:                 |            |
| EMAIL:                     |            |
| DEALERS NAME:              |            |
|                            |            |
| DEALERS ADDRESS:           |            |
|                            |            |
| PHONE AND EMAIL:           |            |
| MACHINE TYPE AND MODEL:    |            |
| SERIAL NO:                 |            |
| APPOX NO. OF BALES WEEKLY: |            |
| NOTES:                     |            |

#### TRAINING & OPERATOR MANUAL REGISTRATION

PLEASE SIGN THE FOLLOWING DECLARATION TO STATE THAT ON THE DAY YOU (THE PURCHASER) PURCHASED YOUR MACHINE, YOU RECEIVED AN OPERATOR'S MANUAL AND TRAINING INSTRUCTIONS

I, the purchaser has received my LSM Operators manual and training from the below dealer/ installation engineer

PURCHASER \_\_\_\_\_ SIGNATURE \_\_\_\_\_  
DATE \_\_\_\_\_  
DEALER \_\_\_\_\_ SIGNATURE \_\_\_\_\_  
DATE \_\_\_\_\_

**(THIS COPY TO BE KEPT IN YOUR MANUAL FOR OWN REFERENCE)**



## 18. WARRANTY

Warranty terms are as follows:

LSM will not accept claims for labour or mileage

**NB: LSM Warranty relates to parts only.**

### WASTE BALER:

- ☐ 1 Year Warranty (Parts & Labour)

---

### NO WARRANTY ALLOWED FOR BREAKDOWNS DUE TO:

- ☐ Misuse of the machine (e.g., overloading by the operator)
- ☐ All hydraulic hoses.
- ☐ Lack of maintenance (e.g., failure to carry out the daily or regular care and maintenance recommended)
- ☐ Putting any unsuitable material in machine (e.g., cans, pressurized containers, metal, wood, glass or any solid materials).

**Note: Balers hired out to and operated by third parties are not covered by warranty, unless previously agreed.**



## 19. END OF LIFE INFORMATION

Your baler is primarily constructed from recyclable materials. When the machine has reached end of life the below guidelines should be followed for safe and environmentally friendly disposal.

- Drain hydraulic oil. Collect in a container and bring to your local recycling centre for disposal
- Disassemble machine and sort into its separate materials.
- Steel components can be sold to a scrap steel merchant.
- All copper wire/electrical components/rubber/nylon should be brought to your local recycling centre for disposal.

[illegible]

Project Description:  
LSM7027-DC-OMR

Customer:  
LSM

Project Name: LSM7027-DC-OMR

Revision: 2

2014/30/EU Electromagnetic Capability Directive  
2014/35/EU Low Voltage Directive



2014/30/EU Electromagnetic Capability Directive  
2014/35/EU Low Voltage Directive

Revision:

2

Customer:  
**LSM**

Project:  
**LSM7027-DC-OMR**

|            |          |       |
|------------|----------|-------|
| 02/09/2020 | SU       | AD    |
| 24/08/2020 | SU       | AD    |
| 25/06/2020 | SU       | AD    |
| DATE       | APPROVED | DRAWN |

LSM Engineering LTD

Unit: +353-57-86 60379  
Email: [info@lsmltd.com](mailto:info@lsmltd.com)  
Website: [www.lsmltd.com](http://www.lsmltd.com)

Co. Louth, Ireland

PROJECT NAME  
**LSM7027-DC-OMR**

COLOUR CODE:

|                    |            |
|--------------------|------------|
| L1                 | Brown      |
| L2                 | Black      |
| L3                 | Grey       |
| N                  | Light Blue |
| Safety Circuit     | Orange     |
| 110V L             |            |
| 110V N             |            |
| 5V +DC             |            |
| 5V -DC             |            |
| 12V +DC            |            |
| 12V -DC            |            |
| 24V +DC            | Dark Blue  |
| 24V -DC            | White      |
| 24V AC             |            |
| 0V AC              |            |
| 48V +DC            |            |
| 48V -DC            |            |
| Volts Free/Sensors |            |
| Analogue           | Screen     |
| + = TITLE          |            |
| REVISION           | 2          |
| SHEET              | 1-5        |

COLOUR CODE:

|                    |            |
|--------------------|------------|
| L1                 | Brown      |
| L2                 | Black      |
| L3                 | Grey       |
| N                  | Light Blue |
| Safety Circuit     | Orange     |
| 110V L             |            |
| 110V N             |            |
| 5V +DC             |            |
| 5V -DC             |            |
| 12V +DC            |            |
| 12V -DC            |            |
| 24V +DC            | Dark Blue  |
| 24V -DC            | White      |
| 24V AC             |            |
| 0V AC              |            |
| 48V +DC            |            |
| 48V -DC            |            |
| Volts Free/Sensors |            |
| Analogue           | Screen     |
| + = TITLE          |            |
| REVISION           | 2          |
| SHEET              | 1-5        |

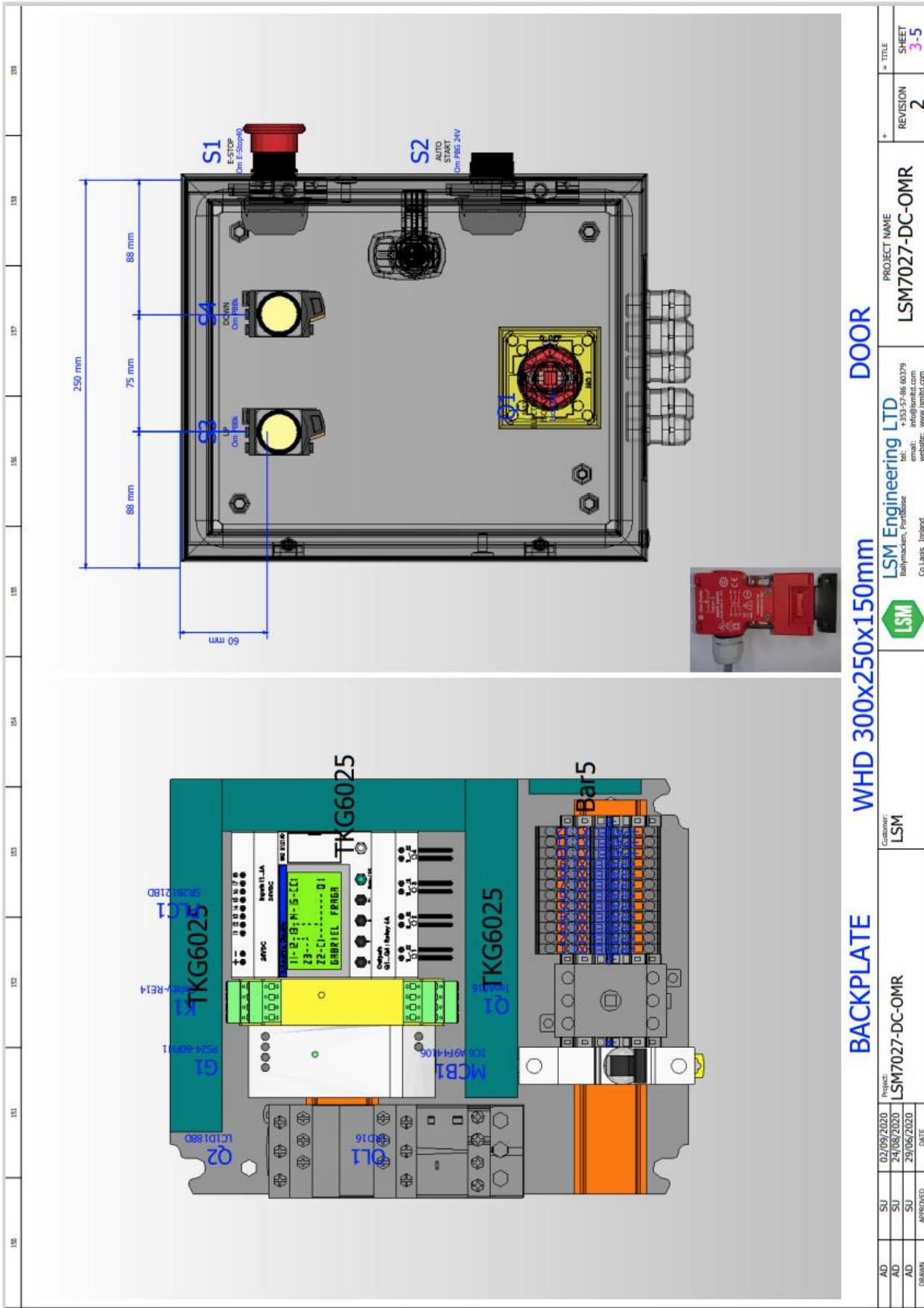


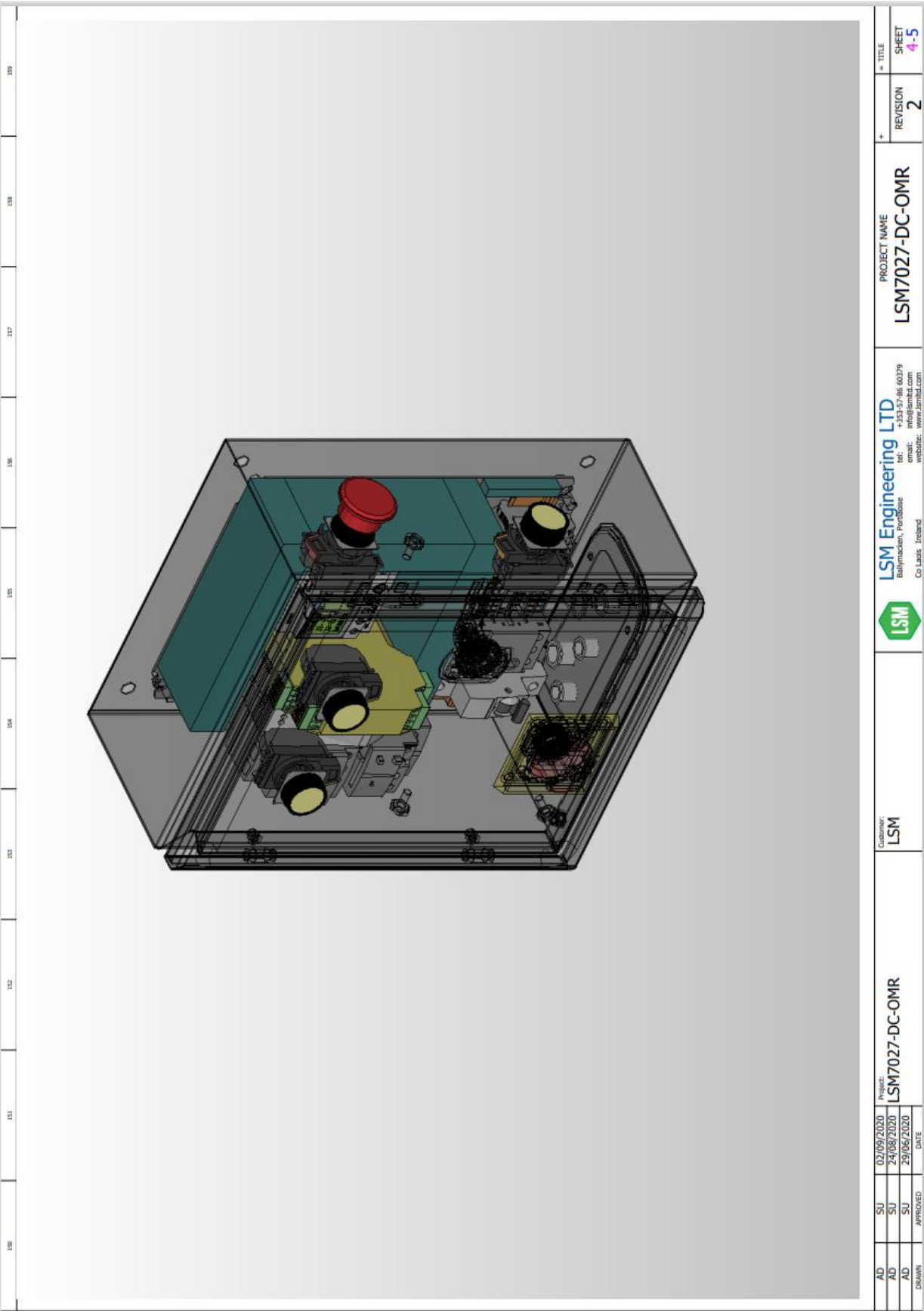
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Tredwell\_TOC\_V2 AD

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|                       |                    | EEA                 | 2    | Table of contents : =TITLE&EEA/1 - +REPORTS&EPB/1 |
|                       |                    | EEA                 | 3    | Enclosure Layouts                                 |
|                       |                    | EEA                 | 4    | Enclosure Overview                                |
|                       |                    | EEA                 | 5    | Enclosure Views                                   |
| PANEL                 |                    |                     | 1    | POWER                                             |
| PANEL                 |                    |                     | 2    | CONTROL                                           |
| PANEL                 |                    |                     | 3    | CONTROL                                           |
| PANEL                 |                    |                     | 4    | SR2B121BD                                         |
| PANEL                 |                    |                     | 5    | SR2B121BD                                         |
| REPORTS               |                    | EMA                 | 1    | Terminal diagram : +PANEL-X1                      |
| REPORTS               |                    | EMB                 | 1    | Cable diagram:W1                                  |
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| REPORTS               |                    | EMB                 | 3    | Cable diagram:W3                                  |
| REPORTS               |                    | EMB                 | 4    | Cable diagram:W4                                  |
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| REPORTS               |                    | EPB                 | 1    | Parts list : PXC.3022276 - PXC.3209549            |

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| AD    | SU       | 24/08/2020 | LSM7027-DC-OMR                                                                                                                                          | LSM       | LSM7027-DC-OMR |   | 2        | SHEET   |
| AD    | SU       | 29/06/2020 |                                                                                                                                                         |           |                |   |          | 2-5     |
| DRAWN | APPROVED | DATE       | <b>LSM Engineering LTD</b><br>Ballymacan, Portlaoise<br>Co Laois, Ireland<br>Tel: +353 51 46 60379<br>Email: info@lsmltd.com<br>Website: www.lsmltd.com |           |                |   |          |         |





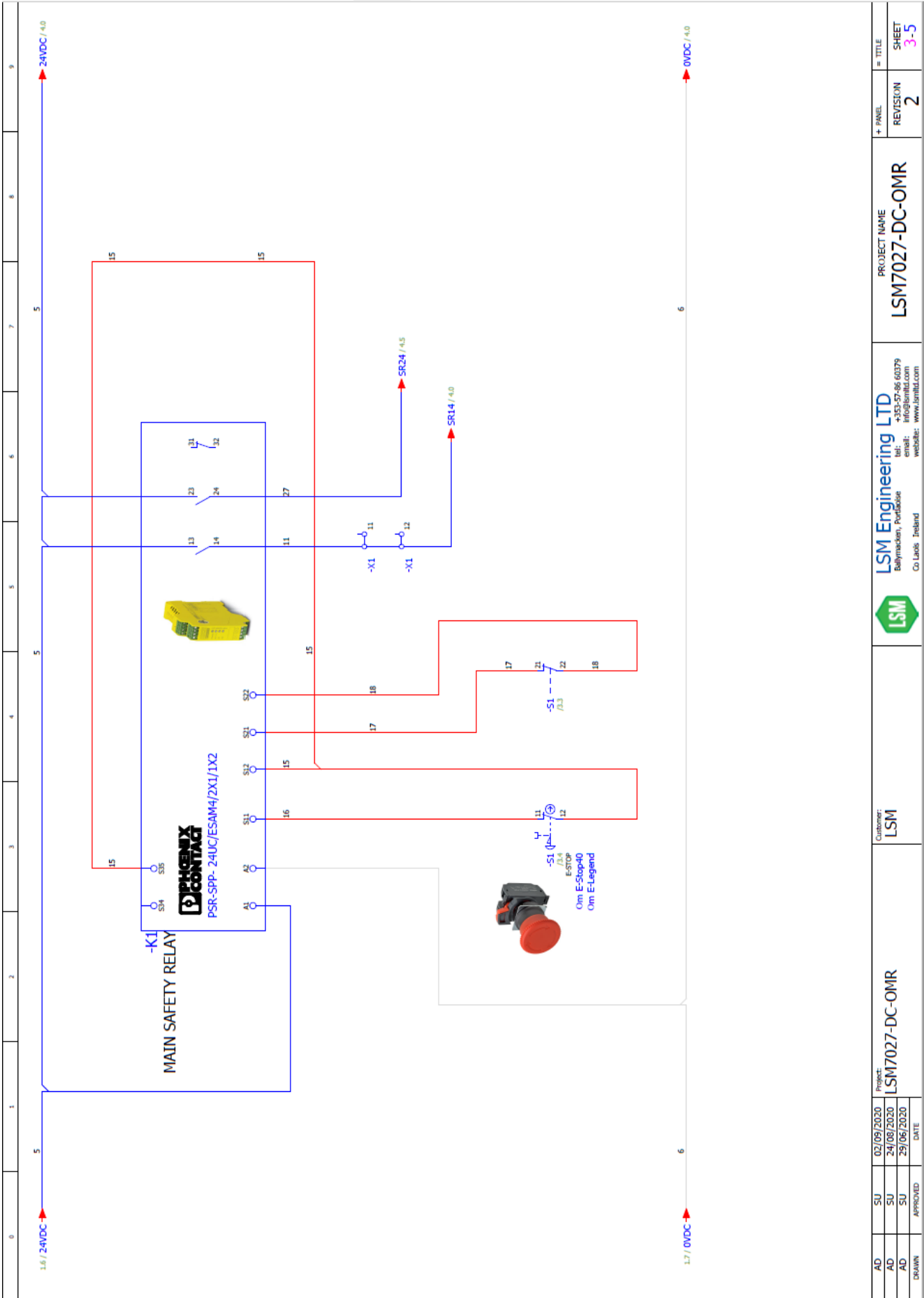


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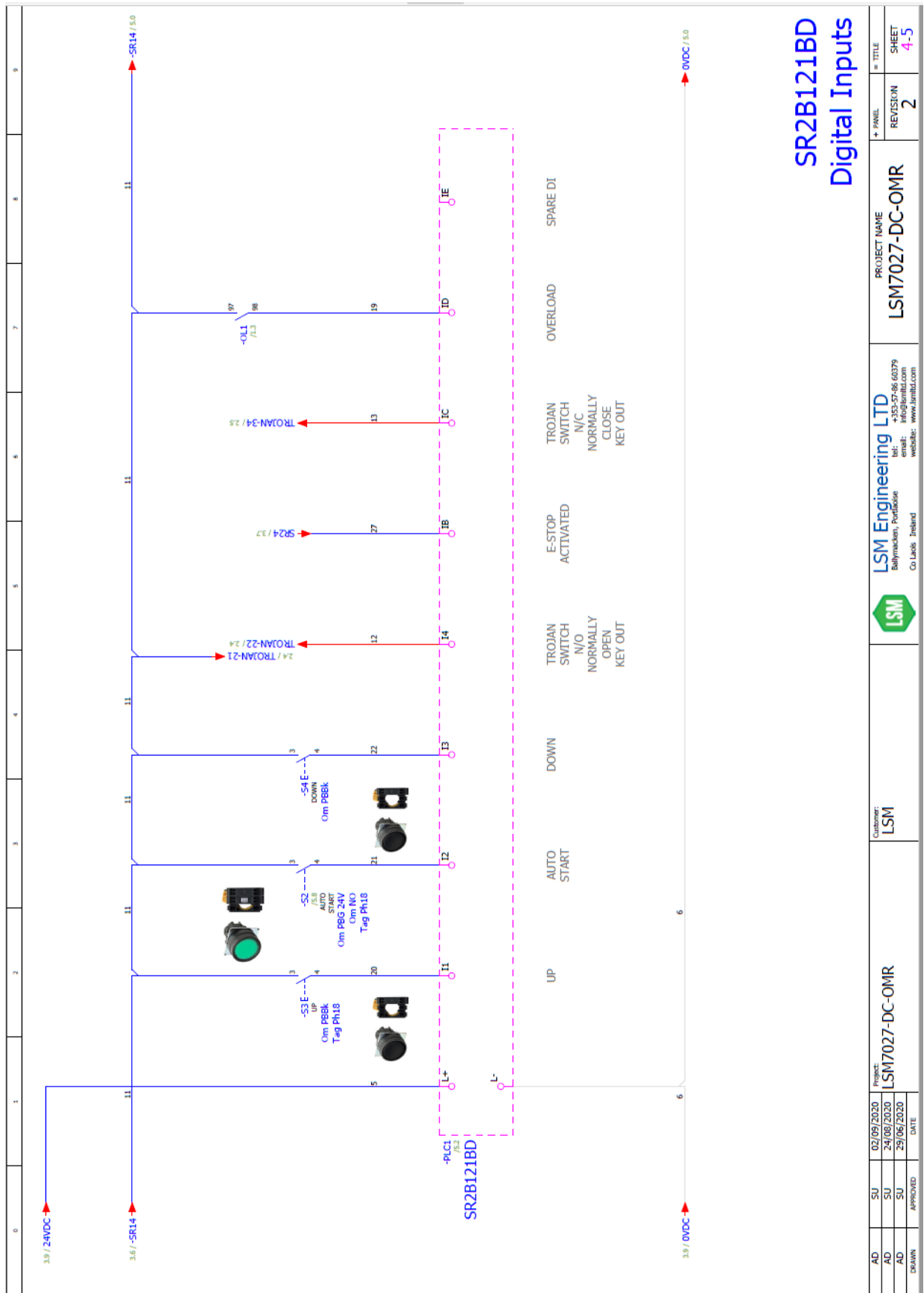
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# V4/V5/V8 ELECTRICAL DRAWINGS



|       |          |            |         |     |          |     |                          |              |                |         |          |   |         |       |     |
|-------|----------|------------|---------|-----|----------|-----|--------------------------|--------------|----------------|---------|----------|---|---------|-------|-----|
| AD    | SU       | 02/09/2020 | Project | LSM | Customer | LSM | LSM Engineering LTD      | PROJECT NAME | LSM7027-DC-OMR | + PANEL | REVISION | 2 | = TITLE | SHEET | 3-5 |
| AD    | SU       | 24/09/2020 |         |     |          |     | Ballymaclean, Portlaoise |              |                |         |          |   |         |       |     |
| AD    | SU       | 29/06/2020 |         |     |          |     | tel: +353-57-86 60379    |              |                |         |          |   |         |       |     |
| DRAWN | APPROVED | DATE       |         |     |          |     | email: info@lsmltd.com   |              |                |         |          |   |         |       |     |
|       |          |            |         |     |          |     | website: www.lsmltd.com  |              |                |         |          |   |         |       |     |





|        |          |            |                                   |                         |                                                                                                                                                                                                                                                                |                                       |                     |                             |
|--------|----------|------------|-----------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------|-----------------------------|
| AD     | SU       | 02/09/2020 | Project:<br><b>LSM7027-DC-OMR</b> | Customer:<br><b>LSM</b> | <br><b>LSM Engineering LTD</b><br>Unit 10,<br>Ballymaclean, Portlaoise<br>Co. Laois, Ireland<br>tel: +353-57-86 60379<br>email: info@lsmltd.com<br>website: www.lsmltd.com | PROJECT NAME<br><b>LSM7027-DC-OMR</b> | + PANEL<br><b>2</b> | = TITLE<br><b>SHEET 5-5</b> |
| AD     | SU       | 24/08/2020 |                                   |                         |                                                                                                                                                                                                                                                                |                                       |                     |                             |
| AD     | SU       | 29/06/2020 |                                   |                         |                                                                                                                                                                                                                                                                |                                       |                     |                             |
| REVIEW | APPROVED | DATE       |                                   |                         |                                                                                                                                                                                                                                                                |                                       |                     |                             |



|                                        |                    |        |         |        |        |                    |               |            |   |
|----------------------------------------|--------------------|--------|---------|--------|--------|--------------------|---------------|------------|---|
| 0                                      | 1                  | 2      | 3       | 4      | 5      | 6                  | 7             | 8          | 9 |
| Terminal Diagram                       |                    |        |         |        |        |                    |               |            |   |
| Tredwell_Multilevel_Terminal_v1.0 - AD |                    |        |         |        |        |                    |               |            |   |
| Terminal Strip<br>+PANEL-X1            |                    |        |         |        |        |                    |               |            |   |
| Internal targets                       |                    |        |         |        |        |                    |               |            |   |
| External targets                       |                    |        |         |        |        |                    |               |            |   |
| ERP Number                             | Target designation | Wire # | Do Lead | Wire # | Wire # | Target designation | Placement     |            |   |
| T3G                                    | -PLC1:Q3:2         | 9      |         | 1      |        | -U1:11             | 440K-TI1467   | =TITLE/2.3 |   |
| T3G                                    |                    |        |         | 2      |        | -U1:12             | 440K-TI1467   | =TITLE/2.3 |   |
| T3G                                    | -S4:3              | 11     |         | 3      |        | -U1:21             | 440K-TI1467   | =TITLE/2.4 |   |
| T3G                                    | -OL1:97            | 11     |         | 4      |        | -U1:22             | 440K-TI1467   | =TITLE/2.4 |   |
| T3G                                    | -PLC1:I4           | 12     |         | 5      |        | -U1:33             | 440K-TI1467   | =TITLE/2.5 |   |
| T3G                                    |                    |        |         | 6      |        | -U1:34             | 440K-TI1467   | =TITLE/2.5 |   |
| T3G                                    | -PLC1:IC           | 13     |         | 7      |        | -K2:X1             | UP SOLENOID   | =TITLE/5.4 |   |
| T3G                                    | -PLC1:Q2:2         | 24     |         | 8      |        | -K2:X2             | UP SOLENOID   | =TITLE/5.4 |   |
| T3G                                    | -Q2:A2             | 6      |         | 9      |        | -K2:X1             | DOWN SOLENOID | =TITLE/5.6 |   |
| T3G                                    |                    |        |         | 10     |        | -K2:X2             | DOWN SOLENOID | =TITLE/5.6 |   |
| T3G                                    | -S2:X2             | 6      |         | 11     | 11     | -K1:14             |               | =TITLE/3.5 |   |
| T3G                                    |                    |        |         | 12     |        |                    |               | =TITLE/3.5 |   |
| T3G                                    | -S3:3              | 11     |         |        |        |                    |               |            |   |

|    |    |            |          |                |           |     |           |     |               |                |           |   |          |   |       |     |
|----|----|------------|----------|----------------|-----------|-----|-----------|-----|---------------|----------------|-----------|---|----------|---|-------|-----|
| AD | SU | 02/09/2020 | Project: | LSM7027-DC-OMR | Customer: | LSM | Customer: | LSM | Project Name: | LSM7027-DC-OMR | + REPORTS | 2 | REVISION | 2 | SHEET | 1-1 |
| AD | SU | 24/08/2020 | Project: | LSM7027-DC-OMR | Customer: | LSM | Customer: | LSM | Project Name: | LSM7027-DC-OMR | + REPORTS | 2 | REVISION | 2 | SHEET | 1-1 |
| AD | SU | 25/06/2020 | Project: | LSM7027-DC-OMR | Customer: | LSM | Customer: | LSM | Project Name: | LSM7027-DC-OMR | + REPORTS | 2 | REVISION | 2 | SHEET | 1-1 |
| AD | SU | 25/06/2020 | Project: | LSM7027-DC-OMR | Customer: | LSM | Customer: | LSM | Project Name: | LSM7027-DC-OMR | + REPORTS | 2 | REVISION | 2 | SHEET | 1-1 |



| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1       | 2                 | 3                 | 4       | 5                 | 6 | 7 | 8 | 9 |                   |        |                   |         |         |             |  |   |  |  |  |  |  |   |  |  |  |  |  |    |  |  |  |  |             |         |         |                   |        |                   |  |  |  |  |       |  |  |  |  |  |       |  |  |  |  |  |    |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------------|-------------------|---------|-------------------|---|---|---|---|-------------------|--------|-------------------|---------|---------|-------------|--|---|--|--|--|--|--|---|--|--|--|--|--|----|--|--|--|--|-------------|---------|---------|-------------------|--------|-------------------|--|--|--|--|-------|--|--|--|--|--|-------|--|--|--|--|--|----|--|
| <div><div><b>Cable ERP</b>    Lead 3P-1.5sq BI1<br/><b>Cable type</b>    x1,5 mm<sup>2</sup><br/><b>Free conductors</b> 0</div><div><b>Cable parts</b>    HANS. Lead 3P-1.5sq BI1<br/><b>Order number</b>    F14900<br/><b>Instructions:</b></div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |         |                   |                   |         |                   |   |   |   |   |                   |        |                   |         |         |             |  |   |  |  |  |  |  |   |  |  |  |  |  |    |  |  |  |  |             |         |         |                   |        |                   |  |  |  |  |       |  |  |  |  |  |       |  |  |  |  |  |    |  |
| <div><div><p>3.13 m</p><p>PLUG</p><p>-W1</p><p>80/Earth 150</p><p>L1</p><p>L2</p><p>L</p><p>N</p><p>PE</p><p>GND</p></div><table border="1"><thead><tr><th>Mouting location:</th><th>Source</th><th>Crimp Part Number</th><th>Stopper</th><th>L1 [mm]</th><th>Part number</th></tr></thead><tbody><tr><td></td><td>L</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>N</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>PE</td><td></td><td></td><td></td><td></td></tr></tbody></table><table border="1"><thead><tr><th>Part number</th><th>L2 [mm]</th><th>Stopper</th><th>Crimp Part Number</th><th>Target</th><th>Mouting location:</th></tr></thead><tbody><tr><td></td><td></td><td></td><td></td><td>-Q1.2</td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>-Q1.5</td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>PE</td><td></td></tr></tbody></table></div> |         |                   |                   |         |                   |   |   |   |   | Mouting location: | Source | Crimp Part Number | Stopper | L1 [mm] | Part number |  | L |  |  |  |  |  | N |  |  |  |  |  | PE |  |  |  |  | Part number | L2 [mm] | Stopper | Crimp Part Number | Target | Mouting location: |  |  |  |  | -Q1.2 |  |  |  |  |  | -Q1.5 |  |  |  |  |  | PE |  |
| Mouting location:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Source  | Crimp Part Number | Stopper           | L1 [mm] | Part number       |   |   |   |   |                   |        |                   |         |         |             |  |   |  |  |  |  |  |   |  |  |  |  |  |    |  |  |  |  |             |         |         |                   |        |                   |  |  |  |  |       |  |  |  |  |  |       |  |  |  |  |  |    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | L       |                   |                   |         |                   |   |   |   |   |                   |        |                   |         |         |             |  |   |  |  |  |  |  |   |  |  |  |  |  |    |  |  |  |  |             |         |         |                   |        |                   |  |  |  |  |       |  |  |  |  |  |       |  |  |  |  |  |    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | N       |                   |                   |         |                   |   |   |   |   |                   |        |                   |         |         |             |  |   |  |  |  |  |  |   |  |  |  |  |  |    |  |  |  |  |             |         |         |                   |        |                   |  |  |  |  |       |  |  |  |  |  |       |  |  |  |  |  |    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PE      |                   |                   |         |                   |   |   |   |   |                   |        |                   |         |         |             |  |   |  |  |  |  |  |   |  |  |  |  |  |    |  |  |  |  |             |         |         |                   |        |                   |  |  |  |  |       |  |  |  |  |  |       |  |  |  |  |  |    |  |
| Part number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | L2 [mm] | Stopper           | Crimp Part Number | Target  | Mouting location: |   |   |   |   |                   |        |                   |         |         |             |  |   |  |  |  |  |  |   |  |  |  |  |  |    |  |  |  |  |             |         |         |                   |        |                   |  |  |  |  |       |  |  |  |  |  |       |  |  |  |  |  |    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |         |                   |                   | -Q1.2   |                   |   |   |   |   |                   |        |                   |         |         |             |  |   |  |  |  |  |  |   |  |  |  |  |  |    |  |  |  |  |             |         |         |                   |        |                   |  |  |  |  |       |  |  |  |  |  |       |  |  |  |  |  |    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |         |                   |                   | -Q1.5   |                   |   |   |   |   |                   |        |                   |         |         |             |  |   |  |  |  |  |  |   |  |  |  |  |  |    |  |  |  |  |             |         |         |                   |        |                   |  |  |  |  |       |  |  |  |  |  |       |  |  |  |  |  |    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |         |                   |                   | PE      |                   |   |   |   |   |                   |        |                   |         |         |             |  |   |  |  |  |  |  |   |  |  |  |  |  |    |  |  |  |  |             |         |         |                   |        |                   |  |  |  |  |       |  |  |  |  |  |       |  |  |  |  |  |    |  |
| <div><div></div><div><b>LSM Engineering LTD</b><br/>Ballymacan, Portlaoise<br/>Co Laois Ireland<br/>tel: +353 57 86 60379<br/>email: info@lsmtd.com<br/>website: www.lsmtd.com</div><div>Customer: <b>LSM</b></div><div>Project: <b>LSM7027-DC-OMR</b></div><div>02/09/2020<br/>24/08/2020<br/>29/06/2020<br/>DATE</div><div>SU<br/>SU<br/>SU<br/>APPROVED</div><div>AD<br/>AD<br/>AD<br/>DRAWN</div></div> <div><div>PROJECT NAME<br/><b>LSM7027-DC-OMR</b></div><div>+ REPORTS<br/>REVISION<br/><b>2</b></div><div>SHEET<br/><b>1-5</b></div></div>                                                                                                                                                                                                                                                                                                                                                                      |         |                   |                   |         |                   |   |   |   |   |                   |        |                   |         |         |             |  |   |  |  |  |  |  |   |  |  |  |  |  |    |  |  |  |  |             |         |         |                   |        |                   |  |  |  |  |       |  |  |  |  |  |       |  |  |  |  |  |    |  |

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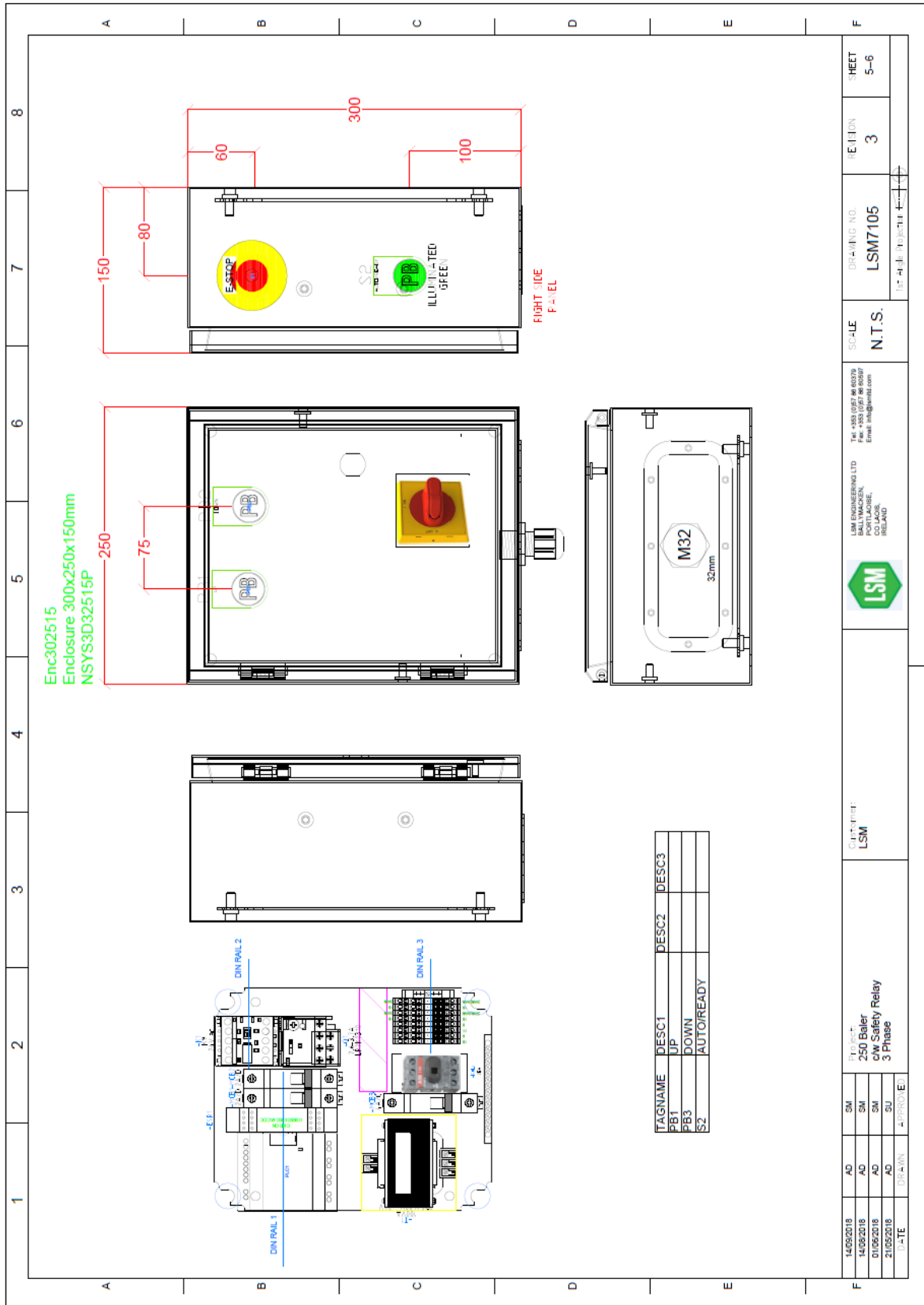
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## 22. V4/V5/V8 1PH ELECTRICAL DIAGRAM STAINLESS STEEL

| 0                                               | 1                  | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
|-------------------------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---------------------------|--------------------|-----------------------|---------|-----------------------|---------|---------------------|------------|---------------------|---------|---------------------|---------|---------------------|---------|---------------------|----------|---------------------|----------|---------------------|----------|---------------------|----------|----------------------|----------|---------|-----------|---------|-------|--------|--|-------|--|---------|--|---------|--|-------------------|--|----------|--------|
| Enclosure Type                                  | Stainless Steel    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| IP                                              | 54                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Colour                                          | -                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Cable Entry                                     | Bottom             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Cable Exit                                      | Bottom             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Cable No. Type                                  | Phoenix Contact    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Front Labels Type                               | Printed Cable      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Cable Type                                      | H05/H07 Z-K        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Form of Separation                              | 1                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Project Description:                            |                    | LSM7027-21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Customer:                                       |                    | LSM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Project Name:                                   |                    | LSM7027-21-SS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Revision:                                       |                    | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 2014/30/EU Electromagnetic Capability Directive |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 2014/35/EU Low Voltage Directive                |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| CE                                              |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Cable Sizing                                    |                    | <table border="1"><tr><td>0.75mm<sup>2</sup></td><td>Controls Wiring</td></tr><tr><td>2.5mm<sup>2</sup></td><td>20 Amps</td></tr><tr><td>4.0mm<sup>2</sup></td><td>25 Amps</td></tr><tr><td>6.0mm<sup>2</sup></td><td>32 Amps</td></tr><tr><td>10.0mm<sup>2</sup></td><td>40 Amps</td></tr><tr><td>16.0mm<sup>2</sup></td><td>63 Amps</td></tr><tr><td>25.0mm<sup>2</sup></td><td>80 Amps</td></tr><tr><td>35.0mm<sup>2</sup></td><td>100 Amps</td></tr><tr><td>50.0mm<sup>2</sup></td><td>125 Amps</td></tr><tr><td>70.0mm<sup>2</sup></td><td>160 Amps</td></tr><tr><td>95.0mm<sup>2</sup></td><td>200 Amps</td></tr><tr><td>150.0mm<sup>2</sup></td><td>250 Amps</td></tr></table>                                                                                       |   |   |   |   |   |   |   | 0.75mm <sup>2</sup>       | Controls Wiring    | 2.5mm <sup>2</sup>    | 20 Amps | 4.0mm <sup>2</sup>    | 25 Amps | 6.0mm <sup>2</sup>  | 32 Amps    | 10.0mm <sup>2</sup> | 40 Amps | 16.0mm <sup>2</sup> | 63 Amps | 25.0mm <sup>2</sup> | 80 Amps | 35.0mm <sup>2</sup> | 100 Amps | 50.0mm <sup>2</sup> | 125 Amps | 70.0mm <sup>2</sup> | 160 Amps | 95.0mm <sup>2</sup> | 200 Amps | 150.0mm <sup>2</sup> | 250 Amps |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 0.75mm <sup>2</sup>                             | Controls Wiring    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 2.5mm <sup>2</sup>                              | 20 Amps            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 4.0mm <sup>2</sup>                              | 25 Amps            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 6.0mm <sup>2</sup>                              | 32 Amps            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 10.0mm <sup>2</sup>                             | 40 Amps            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 16.0mm <sup>2</sup>                             | 63 Amps            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 25.0mm <sup>2</sup>                             | 80 Amps            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 35.0mm <sup>2</sup>                             | 100 Amps           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 50.0mm <sup>2</sup>                             | 125 Amps           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 70.0mm <sup>2</sup>                             | 160 Amps           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 95.0mm <sup>2</sup>                             | 200 Amps           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 150.0mm <sup>2</sup>                            | 250 Amps           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| COLOUR CODE:                                    |                    | <table border="1"><tr><td>L1</td><td>Brown</td></tr><tr><td>L2</td><td>Black</td></tr><tr><td>L3</td><td>Grey</td></tr><tr><td>N</td><td>Light Blue</td></tr><tr><td>PE</td><td>Orange</td></tr><tr><td>Safety Circuit</td><td>Orange</td></tr><tr><td>110V L</td><td></td></tr><tr><td>110V N</td><td></td></tr><tr><td>5V +DC</td><td></td></tr><tr><td>5V -DC</td><td></td></tr><tr><td>12V +DC</td><td></td></tr><tr><td>12V -DC</td><td></td></tr><tr><td>24V +DC</td><td>Dark Blue</td></tr><tr><td>24V -DC</td><td>White</td></tr><tr><td>24V AC</td><td></td></tr><tr><td>0V AC</td><td></td></tr><tr><td>48V +DC</td><td></td></tr><tr><td>48V -DC</td><td></td></tr><tr><td>Volt Free/Sensors</td><td></td></tr><tr><td>Analogue</td><td>Screen</td></tr></table> |   |   |   |   |   |   |   | L1                        | Brown              | L2                    | Black   | L3                    | Grey    | N                   | Light Blue | PE                  | Orange  | Safety Circuit      | Orange  | 110V L              |         | 110V N              |          | 5V +DC              |          | 5V -DC              |          | 12V +DC             |          | 12V -DC              |          | 24V +DC | Dark Blue | 24V -DC | White | 24V AC |  | 0V AC |  | 48V +DC |  | 48V -DC |  | Volt Free/Sensors |  | Analogue | Screen |
| L1                                              | Brown              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| L2                                              | Black              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| L3                                              | Grey               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| N                                               | Light Blue         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| PE                                              | Orange             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Safety Circuit                                  | Orange             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 110V L                                          |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 110V N                                          |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 5V +DC                                          |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 5V -DC                                          |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 12V +DC                                         |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 12V -DC                                         |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 24V +DC                                         | Dark Blue          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 24V -DC                                         | White              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 24V AC                                          |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 0V AC                                           |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 48V +DC                                         |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| 48V -DC                                         |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Volt Free/Sensors                               |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Analogue                                        | Screen             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| PROJECT NAME                                    |                    | LSM7027-21-SS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| PROJECT                                         |                    | LSM7027-21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Customer:                                       |                    | LSM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| LSM Engineering LTD                             |                    | <table border="1"><tr><td>Ballinacorney, Portlaoise</td><td>Co. Laois, Ireland</td></tr><tr><td>tel: +353-57-46 60379</td><td></td></tr><tr><td>fax: +353-57-46 60379</td><td></td></tr><tr><td>website: www.lsm.ie</td><td></td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |   |   |   |   |   |   |   | Ballinacorney, Portlaoise | Co. Laois, Ireland | tel: +353-57-46 60379 |         | fax: +353-57-46 60379 |         | website: www.lsm.ie |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Ballinacorney, Portlaoise                       | Co. Laois, Ireland |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| tel: +353-57-46 60379                           |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| fax: +353-57-46 60379                           |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| website: www.lsm.ie                             |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Customer:                                       |                    | LSM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| Project:                                        |                    | LSM7027-21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| DATE                                            |                    | 08/06/2022                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| APPROVED                                        |                    | SU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
| DRAWN                                           |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |
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| REVISION                                        |                    | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |   |   |   |   |   |   |   |                           |                    |                       |         |                       |         |                     |            |                     |         |                     |         |                     |         |                     |          |                     |          |                     |          |                     |          |                      |          |         |           |         |       |        |  |       |  |         |  |         |  |                   |  |          |        |



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Tredwell\_TOC\_V2 AD

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APPROVED

08/06/2022

DATE

Project: LSM7027-21

Customer: LSM

LSM

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PROJECT NAME

LSM7027-21-SS

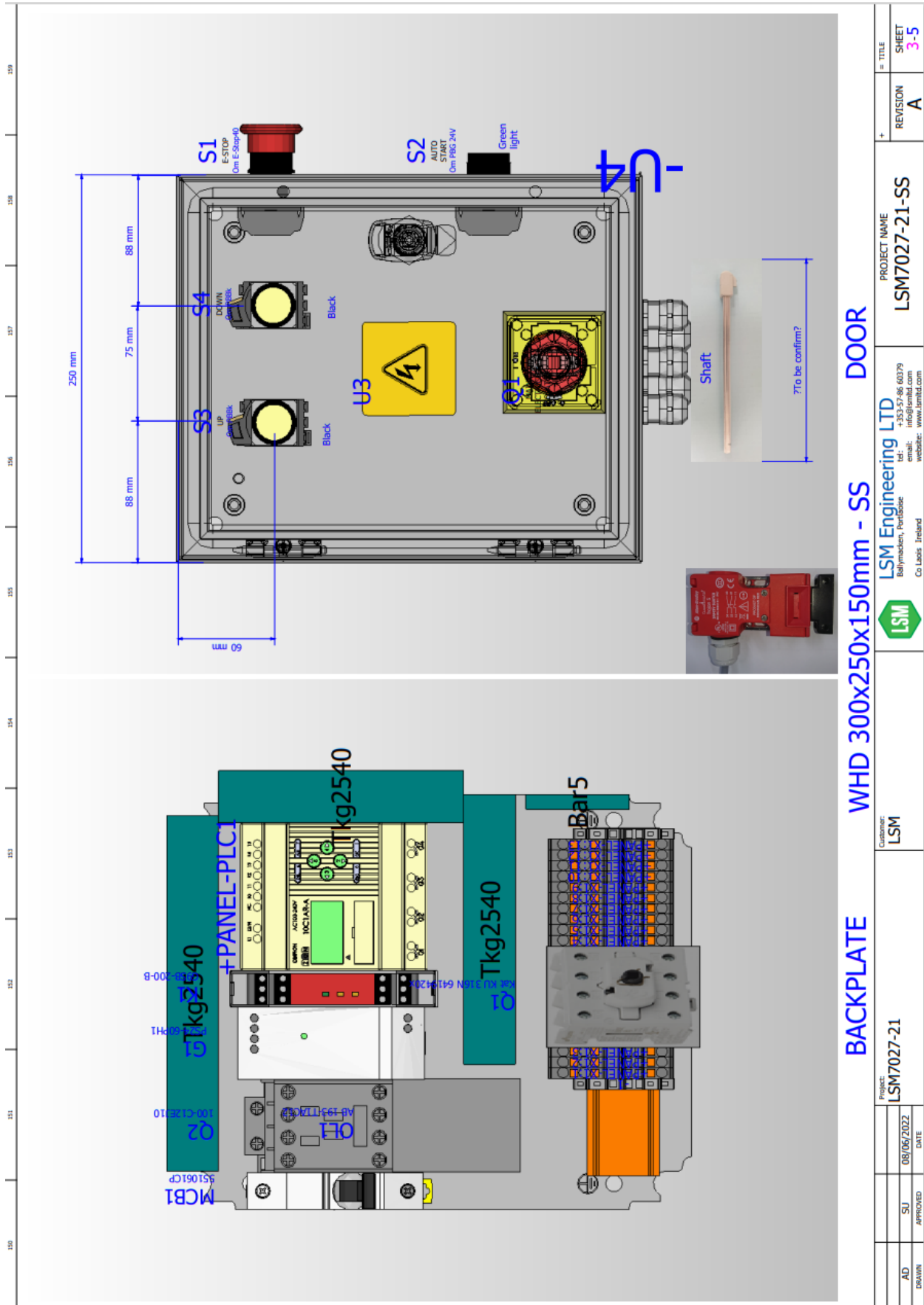
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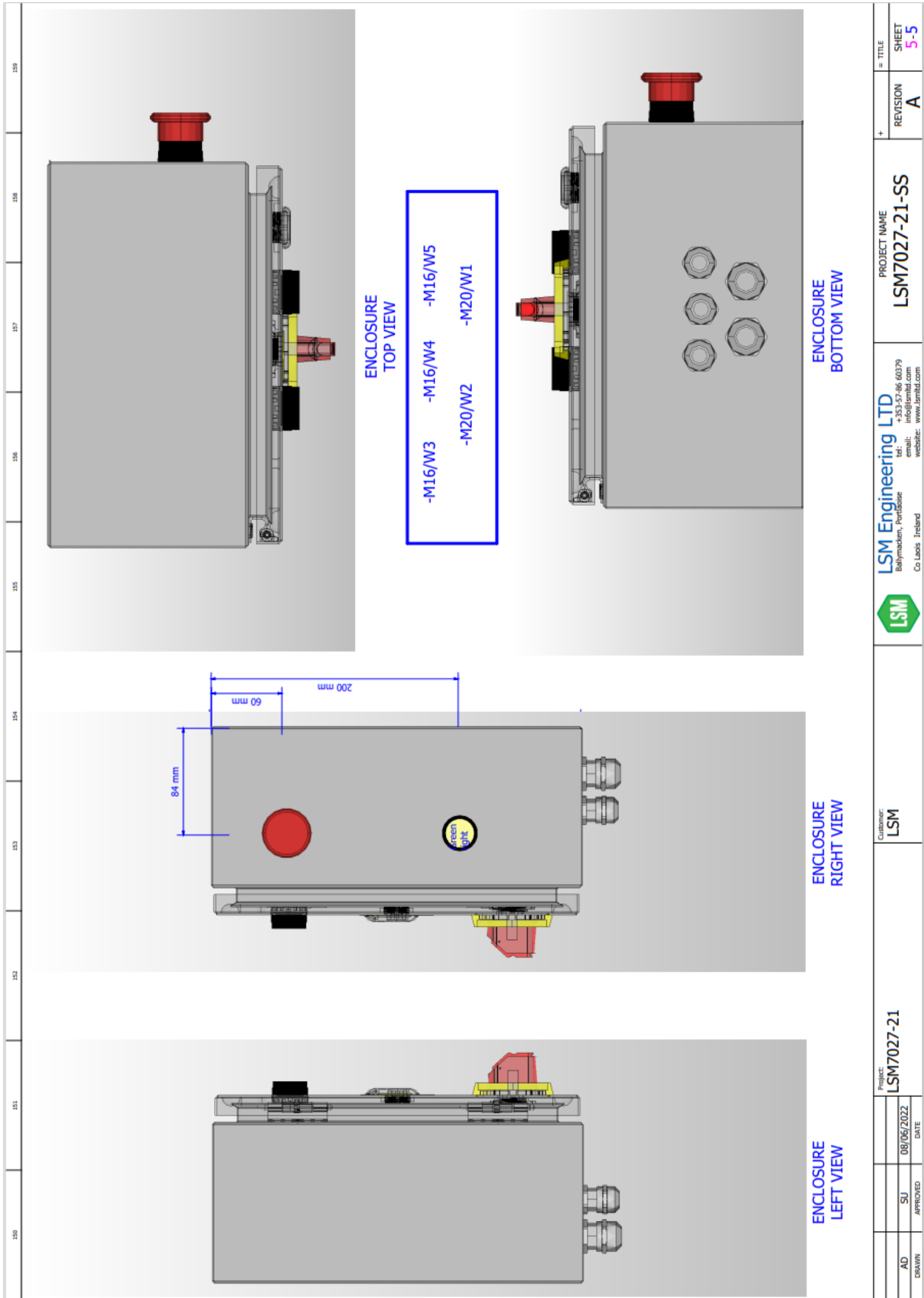
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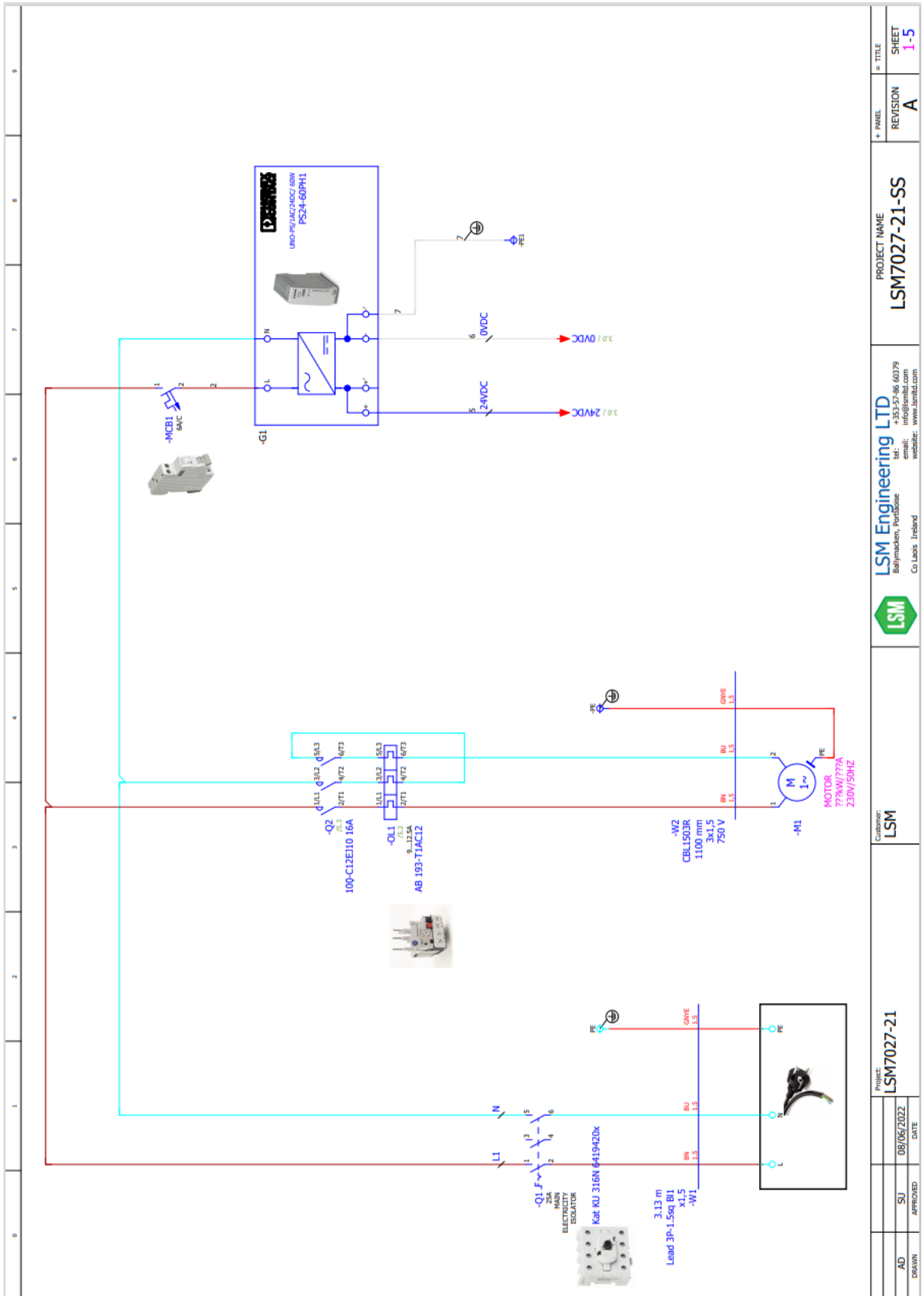


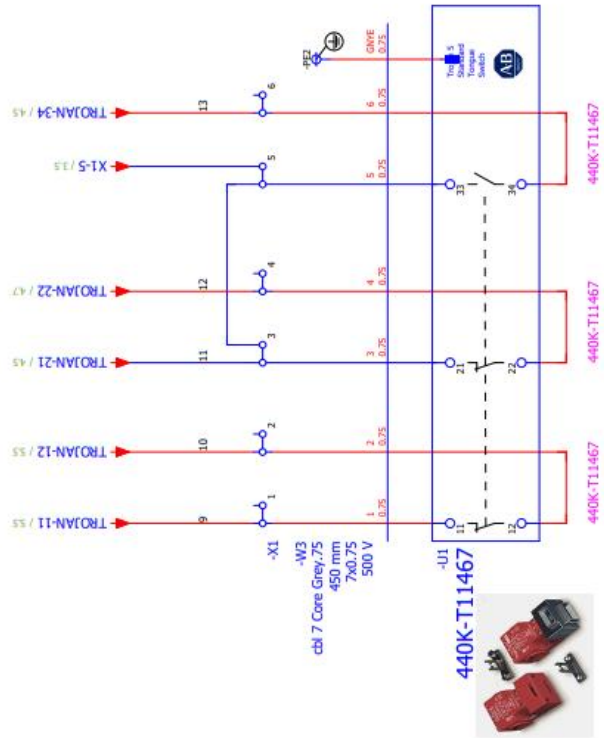


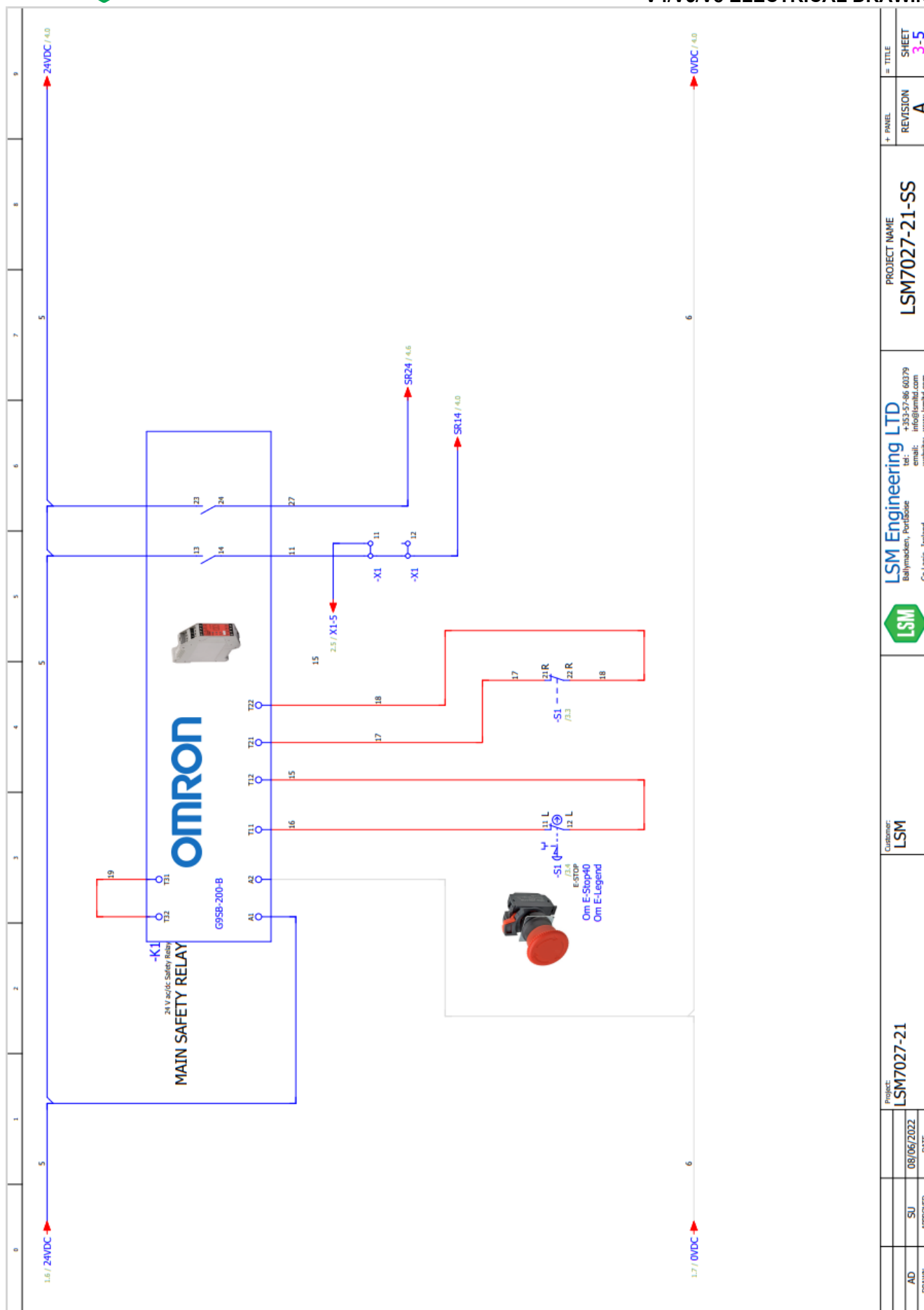
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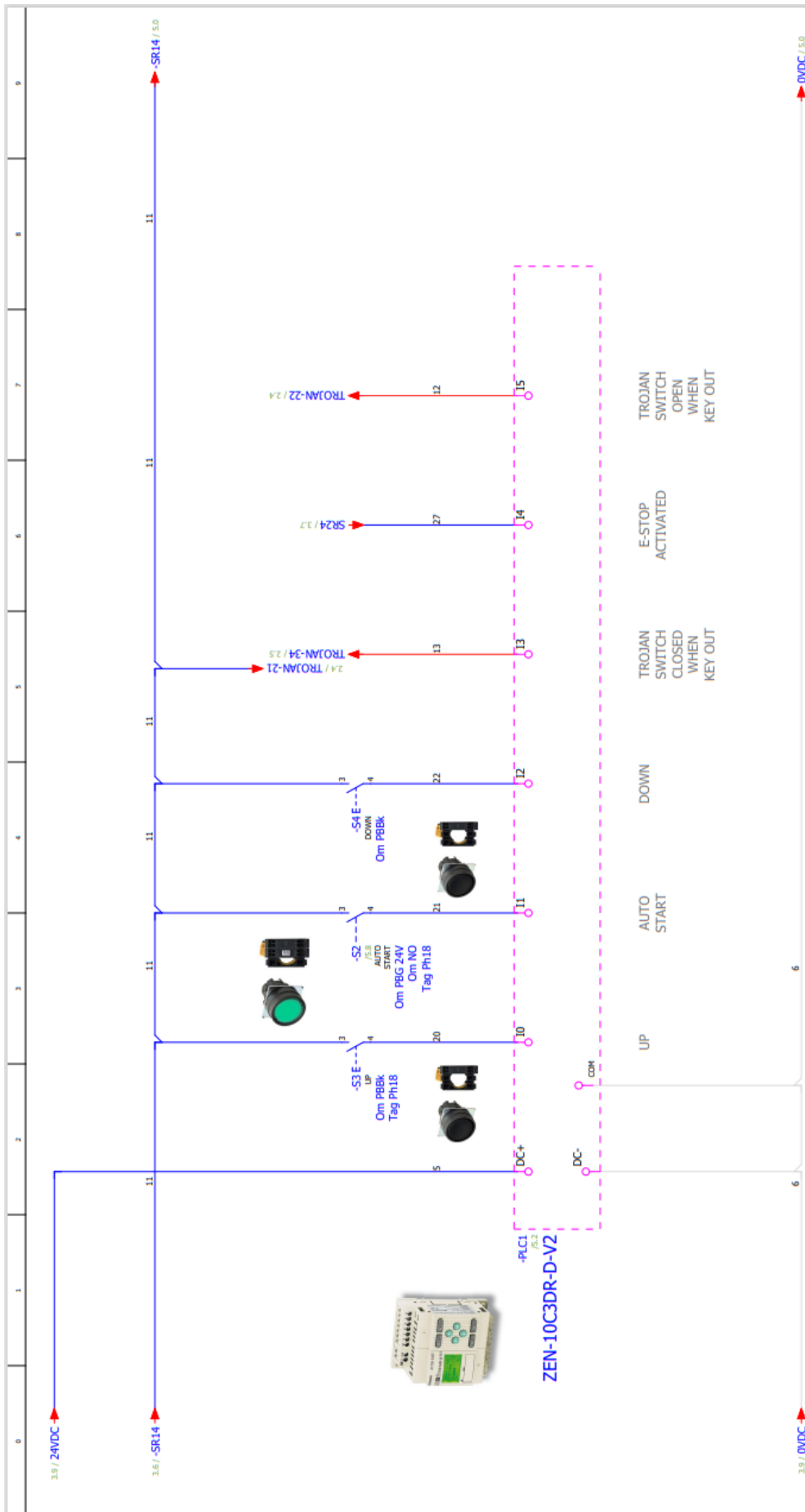
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| Project: LSM7027-21 |          | Customer: LSM | LSM Engineering LTD<br>Ballymacken, Portlaoise<br>Co. Laois, Ireland<br>tel: +353-57-86 60379<br>email: info@lsmtd.com<br>website: www.lsmtd.com |  | PROJECT NAME<br>LSM7027-21-SS | REVISION<br>A | TITLE<br>SHEET<br>4-5 |
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| DRAWN               | APPROVED | DATE          |                                                                                                                                                  |  |                               |               |                       |

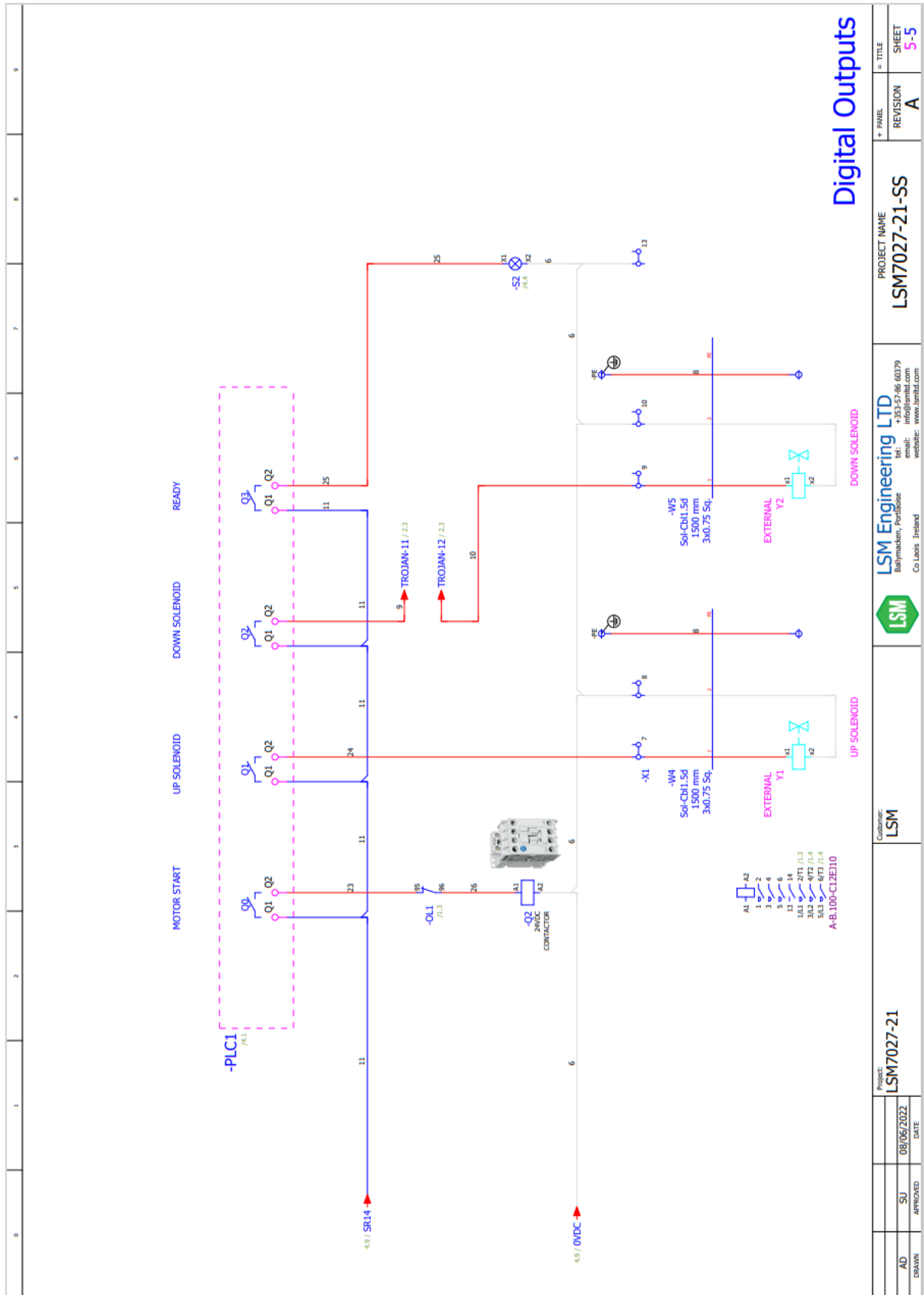




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## Terminal Diagram

Tredwell\_Multilevel\_Terminal\_v1.0 - AD

Terminal Strip  
+ PANEL-X1

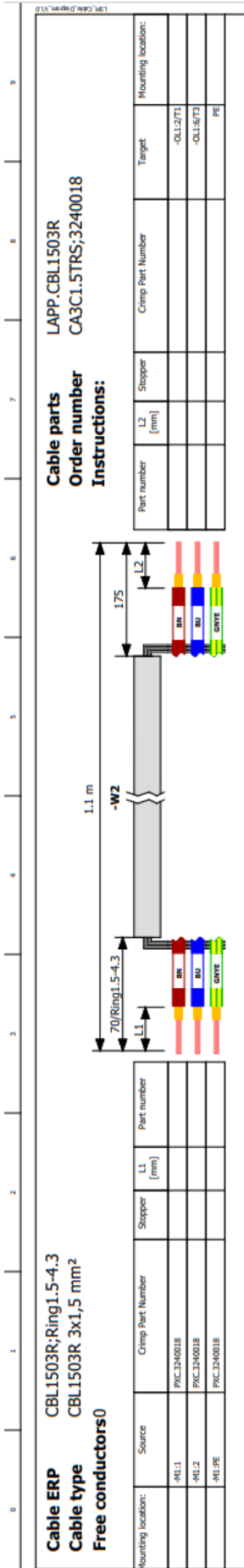
Internal targets

External targets

ERP Number

| ERP Number | Internal targets | Wire # | Wire # | Wire # | Target designation | Placement  |
|------------|------------------|--------|--------|--------|--------------------|------------|
| T3G        | -PLC1:Q3:Q2      | 9      | 0      | 1      | -U1:11             | =TITLE/2.3 |
| T3G        |                  |        | 0      | 2      | -U1:12             | =TITLE/2.3 |
| T3G        | -S4:3            | 11     | 0      | 3      | -U1:21             | =TITLE/2.4 |
| T3G        | -PLC1:Q1:Q1      | 11     | 0      | 4      | -U1:22             | =TITLE/2.4 |
| T3G        | -PLC1:I5         | 12     | 0      | 5      | -U1:33             | =TITLE/2.5 |
| T3G        |                  |        | 0      | 6      | -U1:34             | =TITLE/2.5 |
| T3G        | -PLC1:I3         | 13     | 0      | 7      | -K2:X1             | =TITLE/5.4 |
| T3G        | -PLC1:Q2:Q2      | 24     | 0      | 8      | -K2:X2             | =TITLE/5.4 |
| T3G        | -Q2:A2           | 6      | 0      | 9      | -K2:X1             | =TITLE/5.6 |
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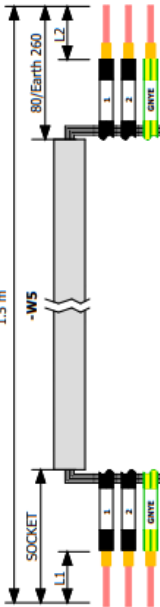
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| 0                                                                                                                                                                                                                                                                                                                                                                                      | 1       | 2       | 3                 | 4      | 5                  | 6 | 7 | 8 | 9 |             |         |         |                   |        |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|-------------------|--------|--------------------|---|---|---|---|-------------|---------|---------|-------------------|--------|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| <b>Cable ERP</b> Sol-Cbl1.5D                                                                                                                                                                                                                                                                                                                                                           |         |         |                   |        |                    |   |   |   |   |             |         |         |                   |        |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Cable type</b> Sol-Cbl1.5d 3x0.75 Sq. mm <sup>2</sup>                                                                                                                                                                                                                                                                                                                               |         |         |                   |        |                    |   |   |   |   |             |         |         |                   |        |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Free conductors</b> 1                                                                                                                                                                                                                                                                                                                                                               |         |         |                   |        |                    |   |   |   |   |             |         |         |                   |        |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Cable parts</b> PXC.1434989                                                                                                                                                                                                                                                                                                                                                         |         |         |                   |        |                    |   |   |   |   |             |         |         |                   |        |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Order number</b> 1434989                                                                                                                                                                                                                                                                                                                                                            |         |         |                   |        |                    |   |   |   |   |             |         |         |                   |        |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Instructions:</b>                                                                                                                                                                                                                                                                                                                                                                   |         |         |                   |        |                    |   |   |   |   |             |         |         |                   |        |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                      |         |         |                   |        |                    |   |   |   |   |             |         |         |                   |        |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <table border="1"><thead><tr><th>Part number</th><th>L2 [mm]</th><th>Stopper</th><th>Crimp Part Number</th><th>Target</th><th>Mounting location:</th></tr></thead><tbody><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table> |         |         |                   |        |                    |   |   |   |   | Part number | L2 [mm] | Stopper | Crimp Part Number | Target | Mounting location: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Part number                                                                                                                                                                                                                                                                                                                                                                            | L2 [mm] | Stopper | Crimp Part Number | Target | Mounting location: |   |   |   |   |             |         |         |                   |        |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                        |         |         |                   |        |                    |   |   |   |   |             |         |         |                   |        |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                        |         |         |                   |        |                    |   |   |   |   |             |         |         |                   |        |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                        |         |         |                   |        |                    |   |   |   |   |             |         |         |                   |        |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

| Project: LSM7027-21 |  | Customer: LSM |  | Project Name: LSM7027-21-SS |  | + REPORTS |  | =     |  |
|---------------------|--|---------------|--|-----------------------------|--|-----------|--|-------|--|
| AD                  |  | SU            |  | LSM7027-21-SS               |  | REVISION  |  | SHEET |  |
| DRAWN               |  | APPROVED      |  | LSM7027-21-SS               |  | A         |  | 5-5   |  |
| DATE                |  | DATE          |  | DATE                        |  | DATE      |  | DATE  |  |

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website: www.lsmtd.com  
Co Louth Ireland



Parts list

Tredwell\_PartsList\_V01

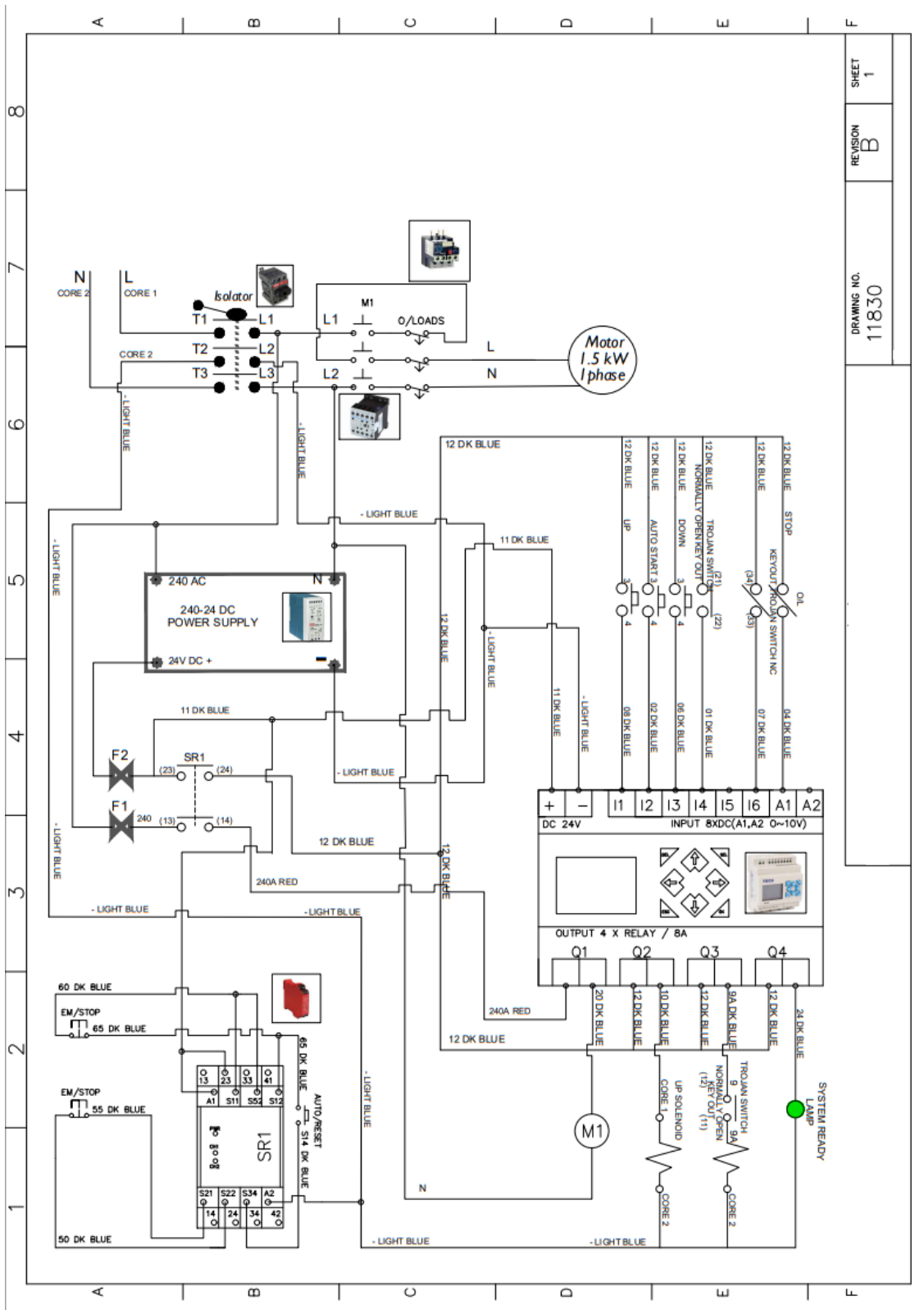
| Designation                                                        | Part number               | Part number ERP No.   | Quantity | Device Designation | Schematic / position |
|--------------------------------------------------------------------|---------------------------|-----------------------|----------|--------------------|----------------------|
| End clamp                                                          | PVC 302276                | End Clamp 3           | 1        | -1                 | (PANEL MP4)          |
| Enclosure WHD: 300x250x150 mm Q/W BP                               | SE 105533                 | SE 105533 15 Lox. RW5 | 1        | -U1                | (PANEL S1)           |
|                                                                    |                           |                       | 0        | -U2                | (PANEL MP4)          |
|                                                                    |                           |                       | 0        | -U3                | (PANEL)              |
| Backplate Metal 600x400mm                                          | SE 10554055               | MSYMH1025             | 1        | -U4                | (PANEL MP5)          |
| Trunking 40(h)x25mm 2m Lgh                                         | DEH Twp2540               | Twp2540               | 1        | -U5                | (PANEL MP4)          |
| Trunking 40(h)x25mm 2m Lgh                                         | DEH Twp2540               | Twp2540               | 1        | -U6                | (PANEL MP4)          |
| Trunking 40(h)x25mm 2m Lgh                                         | DEH Twp2540               | Twp2540               | 1        | -U7                | (PANEL MP4)          |
| DDH rail perforated                                                | PVC 1200421               | Dr-Rail               | 1        | -U8                | (PANEL MP4)          |
| DDH rail perforated                                                | PVC 1200421               | Dr-Rail               | 1        | -U9                | (PANEL MP4)          |
|                                                                    |                           |                       | 0        | -U9                | (PANEL MP4)          |
| Earth Bar Intert Pvc slotted                                       | DE Bar5                   | Bar5                  | 1        | -U10               | (PANEL MP4)          |
| Cable gland                                                        | DEH Gland M20             | Gland M20             | 1        | -U11               | (PANEL S1)           |
| Cable gland                                                        | DEH Gland M20             | Gland M20             | 1        | -U12               | (PANEL S1)           |
| Cable gland                                                        | DEH Gland M16             | Gland M16             | 1        | -U13               | (PANEL S1)           |
| Cable gland                                                        | DEH Gland M16             | Gland M16             | 1        | -U14               | (PANEL S1)           |
| Cable gland                                                        | DEH Gland M16             | Gland M16             | 1        | -U15               | (PANEL S1)           |
| Power supply unit                                                  | PVC 3902992               | PSX 40PH1             | 1        | +PANEL-G1          | =TITLE+PANEL A/1.6   |
| Safety relays, Omron 24 V ac/dc Safety Relay - Dual Channel With 2 | OMR G5LE                  | G5LE-200-B            | 1        | +PANEL-K1          | =TITLE+PANEL A/3.2   |
| Magnetic circuit breaker C60N                                      | BFP 551061CP              | S51061CP              | 1        | +PANEL-ME1         | =TITLE+PANEL A/1.7   |
| Allen Bradley Overload 9.0-12.5 Amps                               | A-B 193-T1AC12            | AB 193-T1AC12         | 1        | +PANEL-OL1         | =TITLE+PANEL A/1.3   |
| Omron ZEN 12 IO Smart Relay 2NOC                                   | OMR ZEN 12                | ZEN 12-DC24V-0-V2     | 1        | +PANEL-PLC1        | =TITLE+PANEL A/4.1   |
| Isolator 16amp 3 Pole                                              | KATO K1316N               | KR KJ 116N            | 1        | +PANEL-Q1          | =TITLE+PANEL A/1.1   |
| Shut 130mm                                                         | KATO K130AD11             |                       | 1        | +PANEL-Q1          | =TITLE+PANEL A/1.1   |
| Handle for isolator                                                | KATO K1410R               |                       | 1        | +PANEL-Q1          | =TITLE+PANEL A/1.1   |
| REC Contactor                                                      | A-B 100-C1EJ10            | 100-C1EJ10            | 1        | +PANEL-Q2          | =TITLE+PANEL A/5.3   |
| Emergency Stop Switch(22-2ba,215-da,2) Push-In Plus terminal type  | OMR A22NE-AK-200-N        | OMR A22NE-AK-200-N    | 1        | +PANEL-S1          | =TITLE+PANEL A/3.3   |
| Omron E-Stop legend                                                | OMR A2222240E             | Om E-Stop             | 1        | +PANEL-S1          | =TITLE+PANEL A/3.3   |
| Pushbutton switches, A22N                                          | OMR A22NL-BNM-TGA-P100-NC | Om E-Stop             | 1        | +PANEL-S2          | =TITLE+PANEL A/4.4   |
| Omron 1x NO Contact block Push-In                                  | OMR A22NC-3P1A            | Om PSC 24V            | 1        | +PANEL-S2          | =TITLE+PANEL A/4.4   |
| Marker carriers - CARRIER-EHP 22 (27x18) - 0827448                 | PVC 0827448               | Tsq Ph18              | 1        | +PANEL-S2          | =TITLE+PANEL A/4.4   |
| Pushbutton switches, A22N                                          | OMR A22NL-BNM-TGA-P100-NN | Om PBN                | 1        | +PANEL-S3          | =TITLE+PANEL A/4.3   |
| Marker carriers - CARRIER-EHP 22 (27x18) - 0827448                 | PVC 0827448               | Tsq Ph18              | 1        | +PANEL-S3          | =TITLE+PANEL A/4.4   |
| Pushbutton switches, A22N                                          | OMR A22NL-BNM-TGA-P100-NN | Om PBN                | 1        | +PANEL-S4          | =TITLE+PANEL A/4.4   |
| Marker carriers - CARRIER-EHP 22 (27x18) - 0827448                 | PVC 0827448               | Tsq Ph18              | 1        | +PANEL-S4          | =TITLE+PANEL A/4.4   |
| Trojan 5 Standard Tongue Switch                                    | A-B 40N-T11467            | 40N-T11467            | 1        | +PANEL-U1          | =TITLE+PANEL A/2.3   |
| 4.5m c/w 16A Schuko Plug, 80mm abgeman. Onne clips                 | LAPP CBL 1503R            | Lead 3P-1.5sq B1      | 1        | +PANEL-W1          | =TITLE+PANEL A/1.0   |
| H07RN-F 3x1.5mm sq. Rubber Cable                                   | PVC 1503R                 | CBL 1503R             | 1        | +PANEL-W2          | =TITLE+PANEL A/1.3   |
|                                                                    |                           | R0911.5-4.3           | 3        | +PANEL-W2          | =TITLE+PANEL A/1.3   |

|                             |                       |    |           |                    |
|-----------------------------|-----------------------|----|-----------|--------------------|
| 7 Core Grey,75              | DEH CH 7 Core Grey,75 | 1  | +PANEL W3 | =TITLE+PANEL A/2.3 |
| Sensor/actuator cable       | PVC 143M69            | 1  | +PANEL W4 | =TITLE+PANEL A/5.4 |
| Sensor/actuator cable       | PVC 143M69            | 1  | +PANEL W5 | =TITLE+PANEL A/5.6 |
| Feed-through terminal block | PVC 3205249           | 13 | +PANEL X1 |                    |
|                             | T3G                   |    |           |                    |

|       |          |            |      |                     |               |              |               |           |          |       |
|-------|----------|------------|------|---------------------|---------------|--------------|---------------|-----------|----------|-------|
| AD    | SU       | 08/06/2022 | DATE | Project: LSM7027-21 | Customer: LSM | PROJECT NAME | LSM7027-21-SS | + REPORTS | REVISION | SHEET |
| DRAWN | APPROVED |            |      |                     |               |              |               | A         |          | 1-1   |

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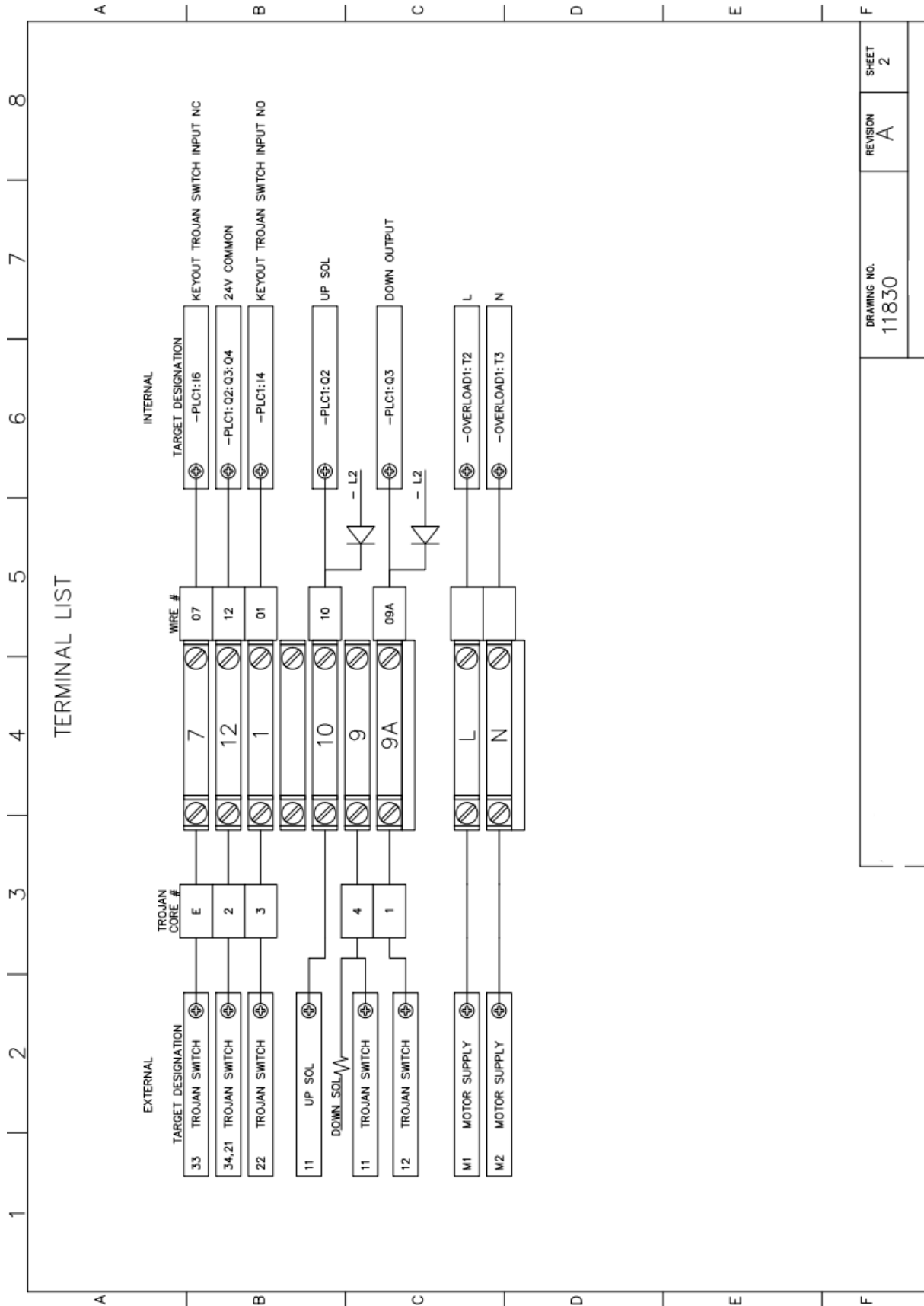
## 23. ELECTRICAL CIRCUIT DIAGRAM TECO PLC



DRAWING NO. 11830

REVISION B

SHEET 1

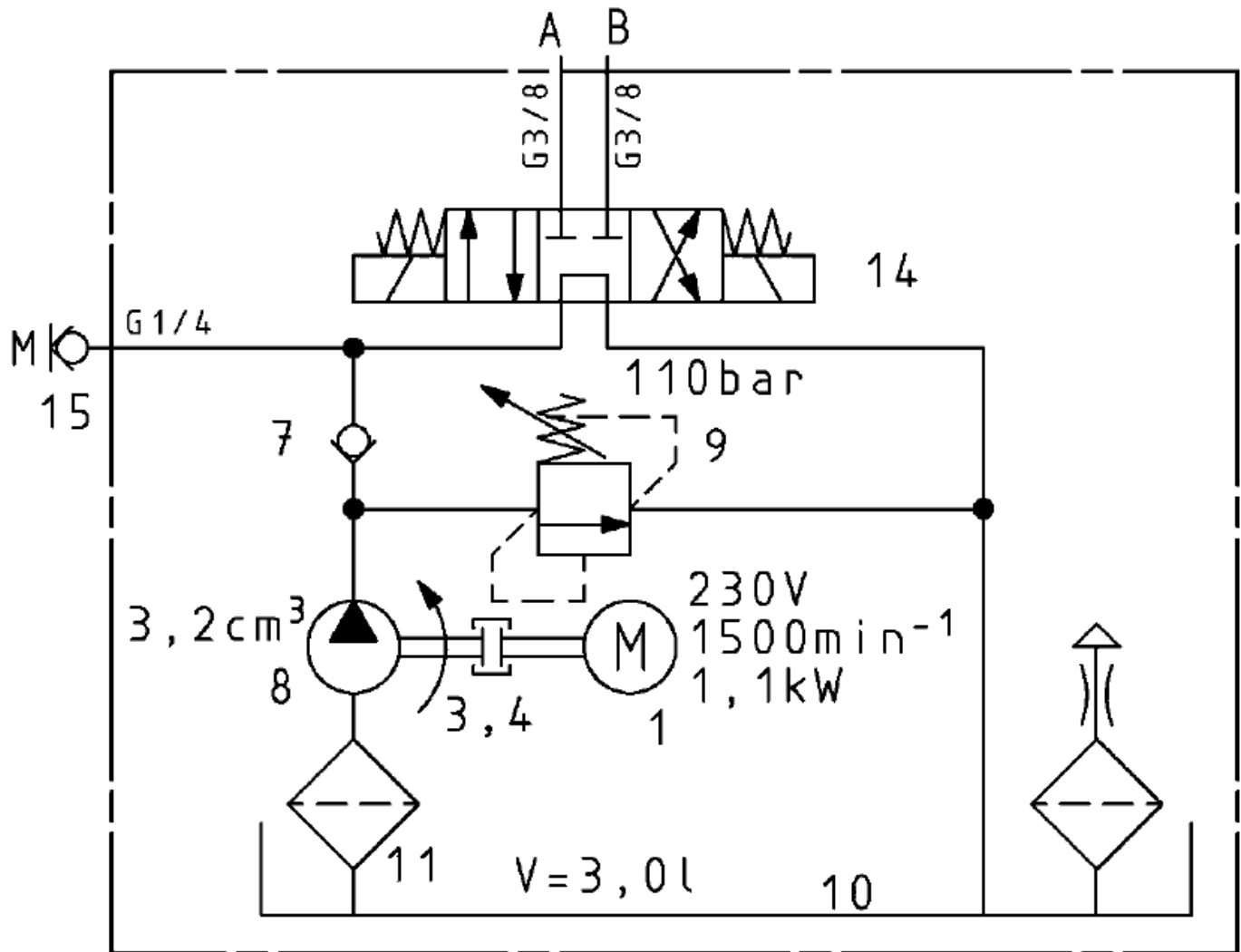


DRAWING NO.  
11830

REVISION  
A

SHEET  
2

## 24. V4/V5/V8 HYDRAULIC DIAGRAM





## 25. REVISION CONTROL

[illegible]



## 26. EC DECLARATION OF CONFORMITY

We hereby certify that the machinery stipulated below complies with all the relevant provisions of the EC Machinery Directive and the National Laws and Regulations adopting this Directive

|                            |                                              |
|----------------------------|----------------------------------------------|
| <b>Machine Description</b> | Waste Compactor                              |
| <b>Make / Model</b>        | V4 Baler                                     |
| <b>Type</b>                | Hydraulic                                    |
| <b>Manufacturer</b>        | LSM Engineering Ltd.                         |
| <b>Address</b>             | Ballymacken, Portlaoise, Co. Laois (IRELAND) |

### Is in conformity with the following Directives and Standards

Directive 2006/42/EC – Machinery Directive  
Directive 2014/30/EC– EMC Directive  
EN 16500 - 2014 Vertical Baling presses

### Applied **Standards and Specifications:**

**EN 12100-1:2010** Safety of Machinery-Basic concepts, general principles for design  
**EN 12100-2:** Safety of Machinery- Technical Principles and specifications  
**EN 60204-1:2018** Safety of Machinery – Electrical equipment of machines  
**EN 574:2008** Safety of Machinery – Two-handed Control Devices-Functional aspects  
**EN 13849-1:2015** Safety of Machinery – Safety Related Parts of Control Systems  
**EN 13850:2015** Safety of Machinery – Emergency Stop – Principles for design  
**EN 61000-6-1:2016** Electromagnetic compatibility (EMC) Parts 1 - 4

**Client Name:** \_\_\_\_\_

**Client Address:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Baler Serial Number:** \_\_\_\_\_

**Authorised Person:** Noel Graham

**Position:** Operations Director

**Address:** Ballymacken, Portlaoise, Co Laois, IRELAND

**CE Effective from Baler Serial No:** 51-100

**Signed:** *Noel Graham*

***We reserve the right to make changes or improvements at any time without incurring any obligation to make such changes on products sold previously.***



## EC DECLARATION OF CONFORMITY

We hereby certify that the machinery stipulated below complies with all the relevant provisions of the EC Machinery Directive and the National Laws and Regulations adopting this Directive

|                            |                                              |
|----------------------------|----------------------------------------------|
| <b>Machine Description</b> | Waste Compactor                              |
| <b>Make / Model</b>        | V5 Baler                                     |
| <b>Type</b>                | Hydraulic                                    |
| <b>Manufacturer</b>        | LSM Engineering Ltd.                         |
| <b>Address</b>             | Ballymacken, Portlaoise, Co. Laois (IRELAND) |

### Is in conformity with the following Directives and Standards

Directive 2006/42/EC – Machinery Directive  
Directive 2104/30/EC – EMC Directive  
EN 16500 - 2014 Vertical Baling presses

### Applied Standards and Specifications:

**EN 12100-1:2010** Safety of Machinery-Basic concepts, general principles for design  
**EN 12100-2:** Safety of Machinery- Technical Principles and specifications  
**EN 60204-1:2018** Safety of Machinery – Electrical equipment of machines  
**EN 574:2008** Safety of Machinery – Two-handed Control Devices-Functional aspects  
**EN 13849-1:2015** Safety of Machinery – Safety Related Parts of Control Systems  
**EN 13850:2015** Safety of Machinery – Emergency Stop – Principles for design  
**EN 61000-6-1:2016** Electromagnetic compatibility (EMC) Parts 1 - 4

**Client Name:** \_\_\_\_\_

**Client Address:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Baler Serial Number:** \_\_\_\_\_

**Authorised Person:** Noel Graham

**Position:** Operations Director

**Address:** Ballymacken, Portlaoise, Co Laois, IRELAND

**CE Effective from Baler Serial No:** 51-100

**Signed:** *Noel Graham*

***We reserve the right to make changes or improvements at any time without incurring any obligation to make such changes on products sold previously***



## EC DECLARATION OF CONFORMITY

We hereby certify that the machinery stipulated below complies with all the relevant provisions of the EC Machinery Directive and the National Laws and Regulations adopting this Directive

|                            |                                              |
|----------------------------|----------------------------------------------|
| <b>Machine Description</b> | Waste Compactor                              |
| <b>Make / Model</b>        | V8 Baler                                     |
| <b>Type</b>                | Hydraulic                                    |
| <b>Manufacturer</b>        | LSM Engineering Ltd.                         |
| <b>Address</b>             | Ballymacken, Portlaoise, Co. Laois (IRELAND) |

### Is in conformity with the following Directives and Standards

Directive 2006/42/EC – Machinery Directive  
Directive 2104/30/EC – EMC Directive  
EN 16500 - 2014 Vertical Baling presses

### Applied Standards and Specifications:

**EN 12100-1:2010** Safety of Machinery-Basic concepts, general principles for design  
**EN 12100-2:** Safety of Machinery- Technical Principles and specifications  
**EN 60204-1:2018** Safety of Machinery – Electrical equipment of machines  
**EN 574:2008** Safety of Machinery – Two-handed Control Devices-Functional aspects  
**EN 13849-1:2015** Safety of Machinery – Safety Related Parts of Control Systems  
**EN 13850:2015** Safety of Machinery – Emergency Stop – Principles for design  
**EN 61000-6-1:2016** Electromagnetic compatibility (EMC) Parts 1 - 4

**Client Name:** \_\_\_\_\_

**Client Address:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Baler Serial Number:** \_\_\_\_\_

**Authorised Person:** Noel Graham

**Position:** Operations Director

**Address:** Ballymacken, Portlaoise, Co Laois, IRELAND

**CE Effective from Baler Serial No:** 51-100

**Signed:** *Noel Graham*

***We reserve the right to make changes or improvements at any time without incurring any obligation to make such changes on products sold previously***



## 27. UKCA DECLARATION OF CONFORMITY

We hereby certify that the machinery stipulated below complies with all the relevant provisions of the UKCA Machinery Directive and the National Laws and Regulations adopting this Directive

|                            |                                              |
|----------------------------|----------------------------------------------|
| <b>Machine Description</b> | Waste Compactor                              |
| <b>Make / Model</b>        | V4 Baler                                     |
| <b>Type</b>                | Hydraulic                                    |
| <b>Manufacturer</b>        | LSM Engineering Ltd.                         |
| <b>Address</b>             | Ballymacken, Portlaoise, Co. Laois (IRELAND) |

### Is in conformity with the following Directives and Standards

Directive 2006/42/EC – Machinery Directive  
Directive 2104/30/EC – EMC Directive  
EN 16500 - 2014 Vertical Baling presses

### Applied Standards and Specifications:

**EN 12100-1:2010** Safety of Machinery-Basic concepts, general principles for design  
**EN 12100-2:** Safety of Machinery- Technical Principles and specifications  
**EN 60204-1:2018** Safety of Machinery – Electrical equipment of machines  
**EN 574:2008** Safety of Machinery – Two-handed Control Devices-Functional aspects  
**EN 13849-1:2015** Safety of Machinery – Safety Related Parts of Control Systems  
**EN 13850:2015** Safety of Machinery – Emergency Stop – Principles for design  
**EN 61000-6-1:2016** Electromagnetic compatibility (EMC) Parts 1 - 4

**Client Name:** \_\_\_\_\_

**Client Address:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Baler Serial Number:** \_\_\_\_\_

**Authorised Person:** Noel Graham

**Position:** Operations Director

**Address:** Ballymacken, Portlaoise, Co Laois, IRELAND

**UKCA Effective from Baler Serial No:** 22 - 050

**Signed:** *Noel Graham*

***We reserve the right to make changes or improvements at any time without incurring any obligation to make such changes on products sold previously.***



## UKCA DECLARATION OF CONFORMITY

We hereby certify that the machinery stipulated below complies with all the relevant provisions of the UKCA Machinery Directive and the National Laws and Regulations adopting this Directive

|                            |                                              |
|----------------------------|----------------------------------------------|
| <b>Machine Description</b> | Waste Compactor                              |
| <b>Make / Model</b>        | V5 Baler                                     |
| <b>Type</b>                | Hydraulic                                    |
| <b>Manufacturer</b>        | LSM Engineering Ltd.                         |
| <b>Address</b>             | Ballymacken, Portlaoise, Co. Laois (IRELAND) |

### Is in conformity with the following Directives and Standards

Directive 2006/42/EC – Machinery Directive  
Directive 2014/30/EC – EMC Directive  
EN 16500 - 2014 Vertical Baling presses

### Applied Standards and Specifications:

**EN 12100-1:2010** Safety of Machinery-Basic concepts, general principles for design  
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**EN 60204-1:2018** Safety of Machinery – Electrical equipment of machines  
**EN 574:2008** Safety of Machinery – Two-handed Control Devices-Functional aspects  
**EN 13849-1:2015** Safety of Machinery – Safety Related Parts of Control Systems  
**EN 13850:2015** Safety of Machinery – Emergency Stop – Principles for design  
**EN 61000-6-1:2016** Electromagnetic compatibility (EMC) Parts 1 - 4

**Client Name:** \_\_\_\_\_

**Client Address:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Baler Serial Number:** \_\_\_\_\_

**Authorised Person:** Noel Graham

**Position:** Operations Director

**Address:** Ballymacken, Portlaoise, Co Laois, IRELAND

**UKCA Effective from Baler Serial No:** 22 - 050

**Signed:** *Noel Graham*

***We reserve the right to make changes or improvements at any time without incurring any obligation to make such changes on products sold previously.***



## UKCA DECLARATION OF CONFORMITY

We hereby certify that the machinery stipulated below complies with all the relevant provisions of the UKCA Machinery Directive and the National Laws and Regulations adopting this Directive

|                            |                                              |
|----------------------------|----------------------------------------------|
| <b>Machine Description</b> | Waste Compactor                              |
| <b>Make / Model</b>        | V8 Baler                                     |
| <b>Type</b>                | Hydraulic                                    |
| <b>Manufacturer</b>        | LSM Engineering Ltd.                         |
| <b>Address</b>             | Ballymacken, Portlaoise, Co. Laois (IRELAND) |

### Is in conformity with the following Directives and Standards

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Directive 2014/30/EC – EMC Directive  
EN 16500 - 2014 Vertical Baling presses

### Applied Standards and Specifications:

**EN 12100-1:2010** Safety of Machinery-Basic concepts, general principles for design  
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**EN 60204-1:2018** Safety of Machinery – Electrical equipment of machines  
**EN 574:2008** Safety of Machinery – Two-handed Control Devices-Functional aspects  
**EN 13849-1:2015** Safety of Machinery – Safety Related Parts of Control Systems  
**EN 13850:2015** Safety of Machinery – Emergency Stop – Principles for design  
**EN 61000-6-1:2016** Electromagnetic compatibility (EMC) Parts 1 - 4

**Client Name:** \_\_\_\_\_

**Client Address:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Baler Serial Number:** \_\_\_\_\_

**Authorised Person:** Noel Graham

**Position:** Operations Director

**Address:** Ballymacken, Portlaoise, Co Laois, IRELAND

**UKCA Effective from Baler Serial No:** 22 - 050

**Signed:** *Noel Graham*

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## 27. ANNEX

### 27.1 Tightening Torques

#### UNTREATED SCREW BLACK FINISH



| PROPERTY CLASS | TORQUE (Nm) | M3   | M4   | M5   | M6   | M7   | M8 | M10 | M12 | M14 | M16 | M18 | M20 | M22 | M24  | M27  | M30  | M33  | M36  | M39  |
|----------------|-------------|------|------|------|------|------|----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 8.8            | Nm          | 1.37 | 3.10 | 6.15 | 10.5 | 17.5 | 26 | 51  | 89  | 141 | 215 | 295 | 420 | 570 | 725  | 1070 | 1450 | 1970 | 2530 | 3290 |
| 10.9           | Nm          | 1.92 | 4.40 | 8.65 | 15   | 25   | 36 | 72  | 125 | 198 | 305 | 420 | 590 | 800 | 1020 | 1510 | 2050 | 2770 | 3560 | 4620 |
| 12.9           | Nm          | 2.30 | 5.25 | 10.4 | 18   | 29   | 43 | 87  | 150 | 240 | 365 | 500 | 710 | 960 | 1220 | 1810 | 2450 | 3330 | 4280 | 5550 |



#### ZINC PLATED

| PROPERTY CLASS | TORQUE (Nm) | M3   | M4   | M5   | M6   | M7   | M8 | M10 | M12 | M14 | M16 | M18 | M20 | M22 | M24  | M27  | M30  | M33  | M36  | M39  |
|----------------|-------------|------|------|------|------|------|----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 8.8            | Nm          | 1.28 | 2.90 | 5.75 | 9.90 | 16.5 | 24 | 48  | 83  | 132 | 200 | 275 | 390 | 530 | 675  | 995  | 1350 | 1830 | 2360 | 3050 |
| 10.9           | Nm          | 1.80 | 4.10 | 8.10 | 14   | 23   | 34 | 67  | 117 | 185 | 285 | 390 | 550 | 745 | 960  | 1400 | 1900 | 2580 | 3310 | 4290 |
| 12.9           | Nm          | 2.15 | 4.95 | 9.70 | 16.5 | 27   | 40 | 81  | 140 | 220 | 340 | 470 | 660 | 890 | 1140 | 1680 | 2280 | 3090 | 3980 | 5150 |



## UKCA DECLARATION OF CONFORMITY



## STAINLESS STEEL

| PROPERTY CLASS | TORQUE (Nm) | M3   | M4   | M5   | M6   | M7   | M8 | M10 | M12 | M14 | M16 | M18 | M20 | M22 | M24  | M27  | M30  | M33  | M36  | M39  |
|----------------|-------------|------|------|------|------|------|----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 8.8            | Nm          | 1.28 | 2.90 | 5.75 | 9.90 | 16.5 | 24 | 48  | 83  | 132 | 200 | 275 | 390 | 530 | 675  | 995  | 1350 | 1830 | 2360 | 3050 |
| 10.9           | Nm          | 1.80 | 4.10 | 8.10 | 14   | 23   | 34 | 67  | 117 | 185 | 285 | 390 | 550 | 745 | 960  | 1400 | 1900 | 2580 | 3310 | 4290 |
| 12.9           | Nm          | 2.15 | 4.95 | 9.70 | 16.5 | 27   | 40 | 81  | 140 | 220 | 340 | 470 | 660 | 890 | 1140 | 1680 | 2280 | 3090 | 3980 | 5150 |



## **28. TERMS AND CONDITIONS**

- 1 GENERAL:** In these conditions, the 'Company' means LSM Ltd., the word 'Dealer' means a customer of LSM Engineering Ltd. purchasing machines from them for resale at recommended retail prices, and the word 'First User' means the first person whom the dealer sells any goods for actual use. The company's employees may negotiate orders and issue quotations, but an order is only binding on the company when it has been acknowledged in writing on the company's official acknowledgement forms. Such acknowledgement and confirmation will only be given subject to these conditions of sale. The acceptance of the goods either at the dealer's premises or those of the first user if delivered direct to the first user shall bind the dealer. The dealer shall only sell to a first use on conditions which incorporate the company's warranty and if he fails to sell the dealer shall have no claim whatsoever against the company except in so far as the company will honour the warranty to the dealer and through him to the first user. The term goods where used means such articles as are invoiced by the company whether manufactured, imported, distributed or otherwise sold by them.
- 2 DELIVERY:** Should the company be prevented from delivering any goods owing to any lock-out, strike, weather conditions, or other exceptional causes occurring either at their own premises, or elsewhere, then delivery shall be postponed until a reasonable time after the occurrence has ceased to cause delay unless the parties shall mutually agree to the cancellation of the contract in respect of such goods.
- 3 CANCELLATION OF ORDERS:** The only grounds for acceptance of a cancellation of an order shall be the non-acceptance of these terms and conditions by the dealer and then only if:
  - a** Within seven days of receiving notification of these Terms and Conditions the dealer notifies the company in writing of its non-acceptance.
  - b** The dealer pays the company any losses suffered including all carriage charges if these have been incurred.
- 4 DELAYS:** While every effort is made to adhere to delivery dates or times quoted by the company though given in good faith are mere estimates only. The company accepts no Liability for delay in delivery or for the consequences of such delay however caused nor shall the dealer be entitled to reject goods by reason there.
- 5 DESIGN:** No responsibility is accepted for any deviation from drawings or from illustration in catalogues, price lists, brochures or advertising material for discrepancies in weight, rated outputs, performance from these mentioned therein which shall be treated as illustrated and approximate only.
- 6 PRICES:** Any fluctuation in prices arising after the contract but before dispatch shall entail adjustment in the contract price and the price to be paid shall be fixed at the date of dispatch.
- 7 DAMAGE, SHORTAGE OR LOSS:** The Company do not accept any responsibility for any damage, shortage or loss in transit when goods are dispatched to instructions and where the transit is affected through a third party and not the company itself.
- 8 CONDITIONS OF SALE:** The dealer shall only resell any of the company's products with the full and unaltered warranty which is issued with every machine invoiced by the company, and which is entailed in clause 9. If the dealer either through negligence or for any other reason fails to get the agreement of the first user to accept this warranty the dealer shall have no other resource against the company except that contained in these conditions of sale and the dealer expressly agrees that in accepting delivery he has no recourse in law against the company nor will he join the company as third or other party in any action which results against him for the resale of the company's products.
- 9 WARRANTY:** The Company warrants its products through the dealer to the first user. The Dealer shall only resell the company's machines with the benefit of the company's warrant:
  - i** The company warrants its products, subject as hereinafter provided, that all new goods supplied by it shall be free from defects in material and workmanship, its liability under such warranty being limited to making good at a factory to be nominated by it, such part or parts which shall within twelve calendar months from the date when the product was delivered new to the retail purchaser be returned to the company and is satisfied on its examination of the part or parts to have been defective in material or workmanship provided that:
    - A** All replaced parts shall become the property of the company.
    - B** The foregoing warranty does not extend to any product which has been repaired, altered, neglected or used in any way so as, in the judgement of the company (whose decision is final) may have adversely affected its stability or reliability, nor does this warrant apply to proprietary articles, accessories or parts not manufactured by the company but where any such warranty is given by the manufacturers of such articles accessories or parts, any benefits under such warranty will be passed on by the company.
    - C** The company will not be responsible for damage or loss caused by incorrect machine settings, operation of the machine in unsuitable conditions, incorrect use of machine and the Company's decision as to the suitability of whatsoever is accepted for damage, which in the company's opinion are caused by hazards of soil, stone or foreign objects.
    - D** The warranty is transferable to a second or subsequent owner (within the warranty period) subject for damage, which in the company being notified in writing of this change of ownership.
    - E** Complaints referring to faulty incomplete deliveries or to obvious faults must be notified to the dealer in writing within fourteen days after receipt of goods. In the absence of such notification's delivery shall be considered as having been accepted as in good order and condition.
  - ii** The company does not give any warrant in respect of goods except the forgoing warranty which is given expressly in lieu of and excludes all other warranties and conditions expressed or implied whether under Common Law, Statue or otherwise and every form of liability for loss and damage direct or consequential or for any accident resulting from defective material, faulty workmanship or otherwise, is expressly excluded.
- 10 LIABILITY:** In no circumstances whatsoever shall the company's liability (in contract, tort or otherwise) to a buyer arising under out of or in connection with this contract or the goods supplied exceed the invoice price of the goods regarding which complaint is made.
- 11 TITLE OF THE GOODS:** The title in the goods shall not pass to the customer until the customer has discharged all sums due by the customer to the company at the date of the final handing over of the possession of the goods.
- 12 INTEREST:** If the customer shall fail to pay any sum on foot of this transaction within fourteen days after the same shall become due, the customer shall pay interest thereon calculated from the due date of payment at an annual rate equal to 4% over the prime rate charged from the time by the associated banks on unsecured loans to individual customers.